Basic Music Theory

How to Read, Write, and Understand Written Music

S o l-U tP ress

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Basic Music Theory: How to Read, Write, and Understand Written Music

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revised and expanded!
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Read what folks have to say about the Music Theory book
versatile enough to be used by middle schools, universities,
and adults!

"Fun and engaging. A real winner!" —Terrie Lyons, PhD, P.C.

"Jonathan Harnum has taken an overly complicated subject matter and made
it learnable for anyone. And I do mean anyone! Harnum de-cryptifies all that
is involved with music theory for the non-musician. But this book is not just
for the non-musician. I have been a student of music for more than 13 years

and a teacher for 3 and I found myself finding new and interesting (and
humorous) facts about music theory. This book can teach anyone music
theory and keep a smile on their face the entire time.”
—Robin Gibelhausen, music teacher, Illinois

“Basic Music Theory by Jonathan Harnum is an excellent book for people of
all levels. I have played various instruments over 24 years and because of
Harnum's matter of fact, conversational tone, this book has lent more to my
understanding of basic music theory than all my private instructors
combined.” —Solstice 1221, Anon. reader in LA

“I appreciate the clever and humorous ways that you introduce many of the
concepts. The illustrations and pictures are very helpful. Can't wait to get to
the bookstore to get a copy for myself.”
—Dave Larsen, elementary teacher, Hawarden, IA

“Basic Music Theory is an ideal and highly recommended text for anyone of
any background wanting to become proficient in the reading, composing,
and performance of written and notated music.”
—Midwest Book Review (5 stars, highest rating)

“This is a book that covers lots of ground without ever appearing "difficult."
It is written in a breezy, conversational manner, so one "talk" naturally drifts
into the next.”
—KLIATT Library Review Service

Even listening to music is proven to make you smarter! No joke.

One important center of this research has been the University of California at Irvine, where Drs. Gordon Shaw and Fran Rauscher have found that active music making improves children's math skills. Shaw is a physicist who found that the inner working of the human brain operates in patterns that resemble musical structures, and he suspects that music may be the key to understanding intelligence.

Other research supports similar conclusions: at McGill University in Canada, researchers found that kids who take piano lessons showed improved general and spatial cognitive development, and studies at a Miami Veterans Administration hospital indicate that music making may improve the brain's natural production of regulatory hormones like melatonin. And most amazingly, an experiment by Rauscher showed that listening to the first ten minutes of the Mozart Concerto for Two Pianos in D Major (K. 448) improved the listeners' spatial-temporal reasoning!

In the days of the New England singing-schools, people believed in teaching and learning music because it was good for the soul. We've learned a lot since then.

If music really can make a person better at math, science and engineering, and if just listening to music can make you smarter, why wouldn't anyone want to benefit from music?

As we begin a new century, there is proof about the power of music education.

And it's still good for your soul.

For more information about music and the brain visit:

www.QuestionsInk.com/brain

Just as there can be No music without learning, no education is complete without music.

This book is dedicated to all my teachers, and to my students, who are also my teachers.

Thank you.

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BasicMusicTheory

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CHAPTER

0

THE CHAPTER EVERYONE SKIPS

A journey of one thousand miles
must begin with a single footstep.

— Lao Tzu c531 B.C.

In This Chapter

- Welcome to Basic Music Theory!
- Why this book?
- Book Overview
- How to Use the Special Features
- Moving On

Welcome to Basic Music Theory!

If you never thought you would pick up a book on music theory, you're not alone. I never thought I'd write one. But in my experience as a student, a player, and a teacher, I have searched for and used many different methods of learning music theory. Some methods were good, most were okay, and a few were bad, but none of them satisfied me.

I've tried to take all the positive things about teaching theory, thrown in many of the tricks I've used with hundreds of students, and tossed in a little humor, in an effort to make learning music theory both easier and more enjoyable. These methods and suggestions have worked well with all students of all sizes. I hope they'll work for you too.

What It's All About

Basic Music Theory is your introduction to another language—the rich and often strange language of music. By the time you've completed even two lessons in this book, you'll have made big steps down the path toward understanding how to read music.

With this language you'll be able to reproduce sounds from nearly a thousand years ago by someone like Guillame de Machaut. And with this same language you can play music by someone like Alannis Morisette, or Limp Bizkit, or Dave Matthews, or Garth Brooks. Name your favorite artist. If it's written down, you'll be able to understand and interpret it!

But let’s not get too carried away. Those musicians you look up to (some of whom have earned millions upon millions of dollars) have spent thousands of hours learning both their instrument and their music theory.
Learning theory will take some focus and some work, but that work will be clearly explained, and you’ll be surprised to find how easy it can be.

Nobody likes to work on a task endlessly. For that reason, the theory lessons are broken up by Interludes every few chapters. These interludes cover things like practice, conducting, Italian terms, and a brief history of musical notation.

So, if you’re interested in the music of Mozart or Metallica, Beethoven or B.B. King, Dizzie Gillespie or Vince Gill, you’ve finally found the right book.

Why Basic Music Theory?

Learning music theory doesn't have to be a long and difficult process. It does take some work, but with this book, you can make that work much easier. I've suffered through some of the most boring music courses a person should be forced to suffer, and have had experience inflicting such boredom on others as well. Believe me, it's not fun on either side!
Whether you're a teacher or a student, I'd like to spare you any of that frustration and difficulty.

Music theory is a language that is used by all Western instruments. Whether you play the kazoo or the krumhorn, voice or vibraphone, French horn or nose flute, pigsnout psaltery or percussion, trombone or triangle, bagpipes or bass fiddle, Sousaphone or Saxophone.... You get the idea. Whatever instrument you play, reading music will be a useful tool in your studies, and this book will teach it to you.

What's Inside

Basic Music Theory is divided in seven Parts, and in each Part are several chapters.

Between some of the Parts are Interludes, stand-alone sections giving information on aspects of music other than theory.

The Codicil (stuff at the back of the book) contains a musical terms glossary, a book index, the keyboard template, and blank staff paper for photocopying (please don't tear it out of the book so others may use it,

too).

Chapters

Each chapter is fairly short and contains detailed information on one or
two topics. When an important term appears for the first time, it is in bold
and italics so that when you do the review at the end of the chapter you
can find the information easily.

Chapter Reviews

At the end of each chapter is a brief review covering the material in the
chapter. The reviews are generally very short, the longest being around
fifteen questions.

Practical Use

Also at the end of each chapter is a short list (often only one item) of
written exercises to hone your music-writing/reading ability.

Parts

Each Part is made up of four to seven Chapters. The division isn't
arbitrary. Information in each Part is related and the reviews come at a
point where a review will do the most good.

Part Review

At the end of each Part is a comprehensive review in the same format
as the chapter reviews. Cross-references below the questions allow
you to quickly find and re-read any section that you haven't quite
remembered yet.

About the End-of-Section Reviews

After each Chapter and Part is a section which contains questions on the
information presented. The reviews are arranged as quizzes, but with one
important difference. The answers are in the margin! That's right, the
answers are right there. How is that supposed to help you? Read on...

The best way to learn is to get immediate feedback. There is no better

way to get feedback than to have the answer right there with the question.
Of course, this does you no good if you can see the answer before reading
the question, so you have to cover up the answers while you give yourself
the quiz. In the back of this book is a cut-out bookmark with a piano
keyboard on it (if this is a library book, please photocopy the keyboard
and leave the original for others to copy as well). Use the keyboard to
cover up the answers while you test yourself.

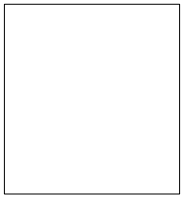
After you answer the question, simply uncover the answer in the margin
and kiss yourself on the elbow for giving the correct answer. If you didn’t

get the answer correct, at least you have the answer right there to remind
you.

Voila. Instant feedback, and your memory of the material is sped right
along.

Once you're confident you know the information, you can either go on to
the next chapter or take the written quiz. You can find the quizzes and a
whole lot more in the Basic Music Theory Teaching Packet. For more
information go to www.QuestionsInk.com/classroom1, (that's the
number one, not the letter "l" at the end of the web address).

Basic Music Theory is meant to be used as a textbook and study guide,
with written work taking place on the blank staff paper photocopied from
the back of the book. That way the book may be used over and over
again. Of course, if you've bought this book for your own personal use,
mark it up!



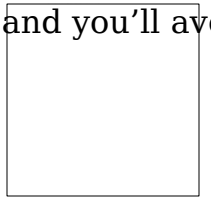
The Icons

Memory Tip

This icon is placed near methods to improve your memory of terms,
notes, and other fun stuff. These little memory tricks will save you a lot
of brain strain.

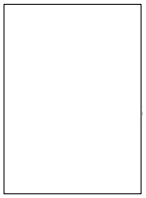
Take Notice

This icon is placed near information that is particularly useful to know.
Heed this information and you'll avoid common mistakes.



Theory Geek Alert

This icon is placed near information that isn't especially necessary, but
might be interesting.



Basic Music Theory: Overview

Chapter 0: General Information

In addition to what you've already read, this part will give you an
overview about the book as well as tips on how to study the information.

Part I: Start Me Up

Chapter 1. This section is where the fun begins. And what better way to
start than with something other than music theory! The first chapter is an
ultra-ultra-brief history of written music. It'll be painless, I promise.

In Chapters 2-5 you'll learn the basic terms and symbols of written

music, how they look, what they mean, and what they do; also in this
section are note names, pitches, and of course the review. You'll be able
to read music in only one or two lessons.

Part II: The Clefs

Chapters 6-9. The party continues. In this section you'll find more
symbols (no, not cymbals) used in written music. Chapter 6 covers
general information about clefs, and Chapters 7-9 give you the specifics
of the bass, treble and percussion clefs. In four easy lessons you'll
understand what these signs tell you.

Interlude: Musical Terms

Chapter 10. Time for a break. This Interlude is all about musical terms,
most of which are in Italian. You'll learn the terms, what they mean, and
what they tell you to do.

Part III: You Got Rhythm

Chapters 11-17. This is the longest Part with 7 chapters, in which you'll
learn about note lengths and how they're related to each other, several
different rests, time signatures, a method for counting rhythms, what a
dot does to a note, and triplets.

Interlude: To Play or Not to Play

Because that last part was so long, we'll take another short break. This
Interlude is all about practice. How to go about it, how to structure it,
how to record it in a journal and on a tape recorder, equipment you'll
need and how to use it, and how to do what must be done to become a
better player.

Part IV: See Sharp or Be Flat

Chapters 18-21. Once you've got the basics of reading music down, we go into more advanced concepts. This section shows you how to use the piano keyboard, covers whole steps and half steps, sharps, flats, and naturals, the chromatic scale, enharmonic notes, and key signatures.

Part V: Intervals and Minor Scales

Chapters 23-26. In this section you'll learn how to measure the interval from one note to another, and using that information you'll learn how to

construct a minor scale beginning on any note. From there you'll move
on to modes, and finally to several other types of scales.

Interlude: Conducting Yourself

Chapter 27. The final interlude. In this Interlude you'll learn the basics of
conducting, conducting patterns, body and facial language, and the work
it takes to become a good conductor. Also learn how to use conducting
patterns to enable you to write down what you hear.

Part VI: Chords

Chapters 27-30. Here you'll learn about how chords are constructed and
the many different types of chords. You'll also learn about chord
extensions and the symbols they use, chord inversions, and several basic
chord progressions.

Part VII: More of the Same

In this final short section are some concepts which go further than when
they were originally introduced. Included are double dots, double sharps
and double flats, faster notes, 6/8 time and odd meters.

Codicils

Teacher Information: A quick summation of the Basic Music Theory
Classroom Packet.

Glossary of Musical Terms: Here they are. A quick reference and not
exhaustive by any means, but you'll find most of what you might be
looking for.

Index: This is a cross-reference to all the terms and concepts presented in
the book, so you can find any topic covered quickly and easily.

Blank Staff Paper: To be used for the Practical Use sections at the end of
the Chapter Reviews. Please leave the staff paper in the book so others
may use them later. Feel free to make as many copies as you need. Make
extras. Give them to your friends.

Piano Keyboard: One side with the note names, one side for you to fill in later. Also used with the End-of-Section Reviews as mentioned next.

How to Use the Special Features

The End-of-Section Reviews

What's different about these reviews is that the answers are right there with the questions. Also, in case you want to go back to review the information, there's a reference (in itty bitty writing) to the page where you can look at the information again.

The answers are on the right side of the page, and the questions on the left. While reviewing the chapter, to cover up the answer, you'll use . . .

The Keyboard

In the back of the book is a piano keyboard template, double-sided with the keys named on one side and blank on the other. The keyboard is used as a bookmark, as a cover for the study guide answers and—can you believe it?—also as a keyboard. To keep the book useful for everyone, please photocopy the keyboard if this book is borrowed.

Practical Use

After the Chapter Reviews are Practical Use exercises, most of which will be done on the staff paper you've copied from the back of the book. There may be as many as four exercises, or as few as one.

Moving On

Okay, enough details. If you've read them, good job! You'll have a better handle on how to get the most out of this book and you won't be at all surprised or confused about what's next.

Part I: Start Me Up is next, and the first chapter is about how written music came to be. Hope you like it!

The Table of Contents in the eBook version of
Basic Music Theory 1st ed. is hyperlinked.
Navigate the entire book quickly and easily
using the Table of Contents, Book Index and all
Cross-References.
$4.95

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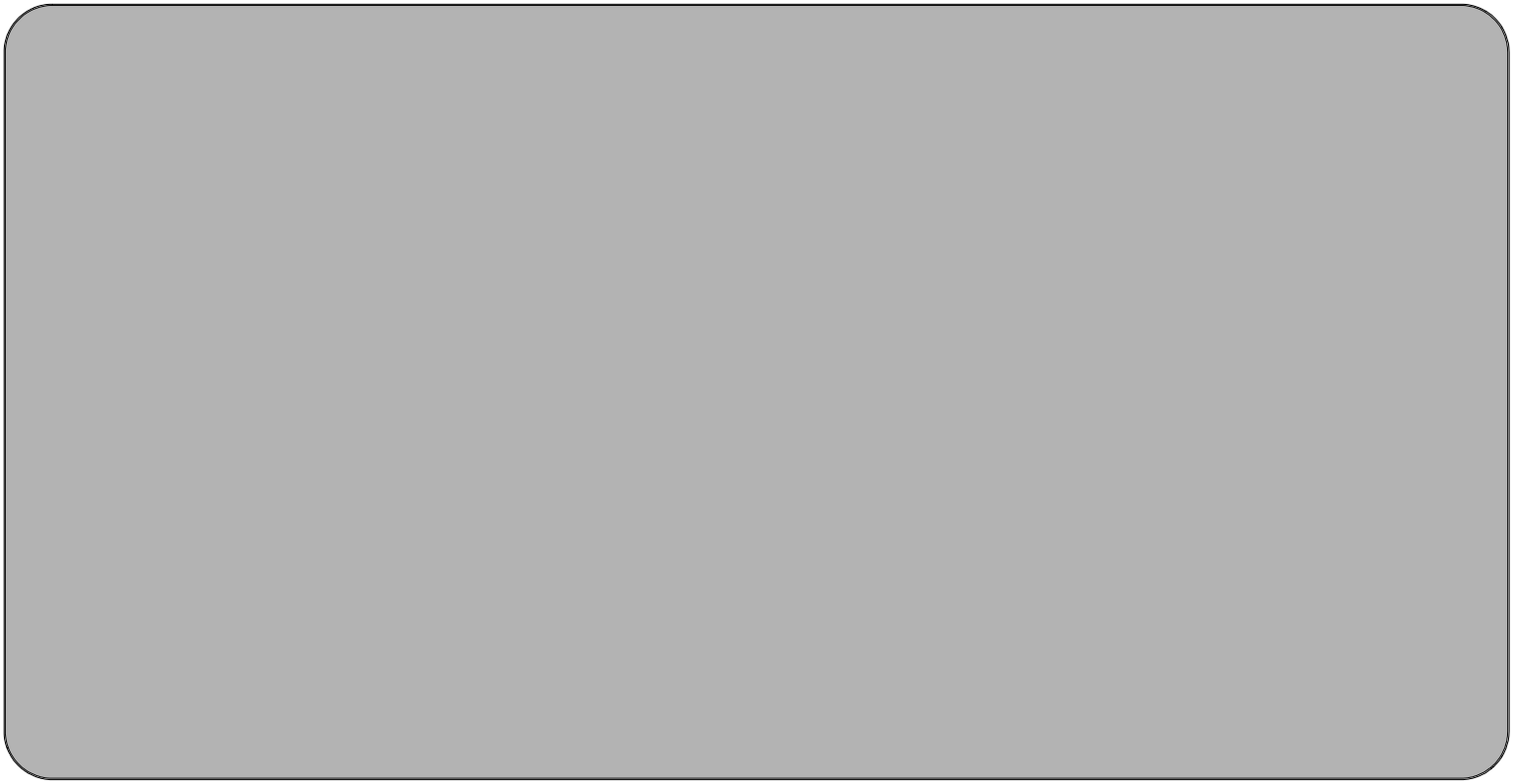
0: The Chapter Everyone Skips

10

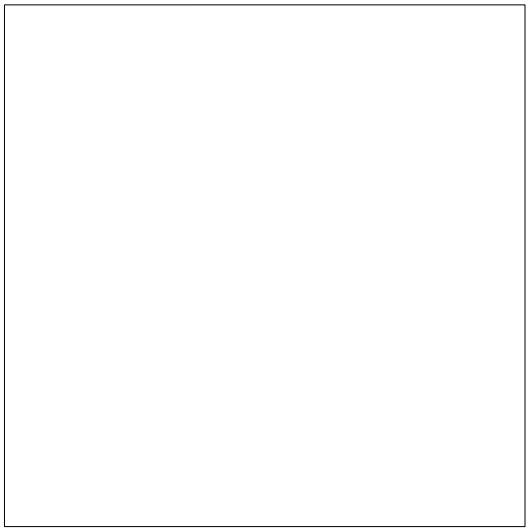
PART ONE

Start Me Up



In This Section You Will Learn:

- A Brief History of Notation
- The Staff
- Bar Lines
- Measures
- High and Low
- Pitch Names
- Leger Lines



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Chapter 1
Prelude

An Ultra-brief History of Musical Notation

History doesn't repeat itself,
but it does rhyme.

— Mark Twain

In This Chapter

- The Origin of Hearing
- The Origin of Music
- Music Performed
- The Origin of Written Music

Hear, There, Everywhere

When you hear something you like, thank a fish. About five hundred million years ago fish began to develop the ability to sense vibrations, but not with anything we would call an ear. Amphibians improved on the fishy system with sack-like organs containing clumps of neurons devoted only to sensing vibrations, much like the ears frogs have today. Birds improved the design even further.

The ear reached its peak with mammals and the appearance of pinna, the fleshy outer ear which funnels sound to the cochlea, one of the many tiny pieces of the inner ear. The cochlea takes sound vibrations, converts them into nerve impulses and sends them to the brain.

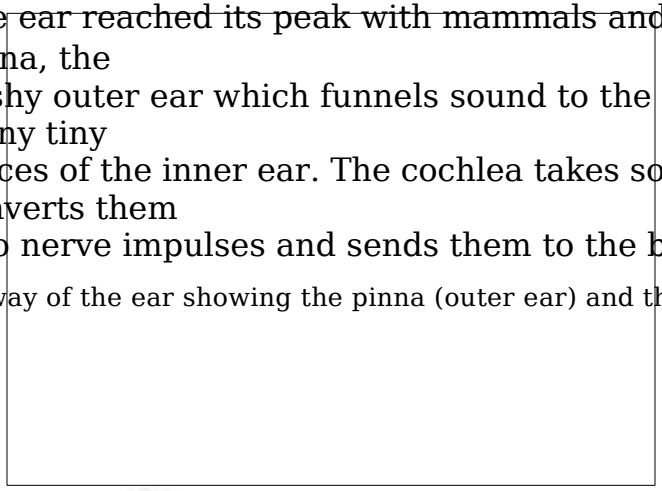


Figure 1.1 Cutaway of the ear showing the pinna (outer ear) and the cochlea within the inner ear.

It took over one hundred million generations of critters to evolve an ear capable of hearing the ecstasy of the B Minor Mass, the groove of Enter Sandman, or the blistering Bebop of Charlie Parker.

With this wonderful ability to hear, it’s no surprise that we humans began

to organize sounds into patterns of rhythm and pitch. That’s music. A question that will remain unanswered forever is what the first instrument was. Some say drum, some say voice, but we’ll never know for sure. Maybe it was something completely different.

Music Performed

From the very beginning, music was linked with magic and shamanism,
and still is. Wherever you find a shaman, you'll probably find a drum.

Music has magical powers. It can transport you into an altered state, heal
sickness, purify the body and mind, and work miracles in nature. In the
Old Testament David cures Saul's madness with a harp, and the walls of
Jericho were brought tumbling down by horns.

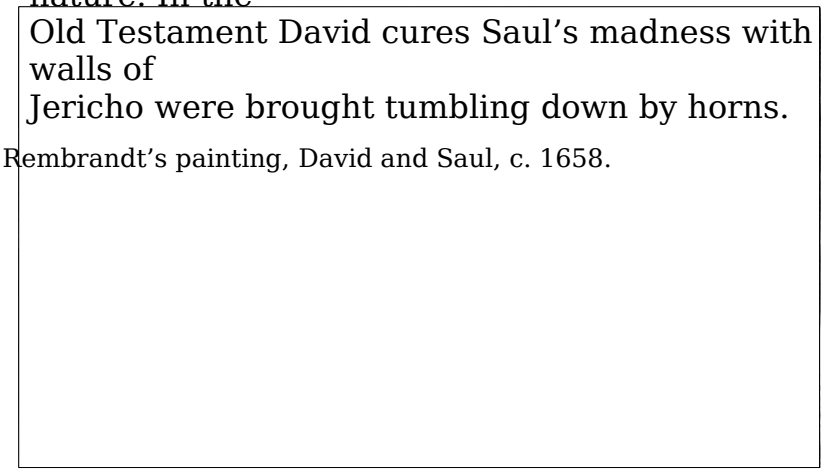


Figure 1.2 Rembrandt's painting, David and Saul, c. 1658.

You may scoff at such primitivism, but do it softly and don't let anyone
hear you. Recent discoveries are showing that such ideas are not so
cracked as you might think. Don't believe me? Okay, here are some
examples:

Imagine. It's night. A cavern begins to fill with creatures which normally
keep distance between themselves and the others of their kind. They
rarely touch. Tonight, because of sound, they will experience an altered
state of being.

Soon there will be ten thousand of them. Then twenty thousand. Thirty.
More. Tonight they will crush together and dance to the music. On a
raised platform, anywhere from three to a dozen people stroke or bang on
or breathe into instruments which produce complex rhythms and pitches.
The sound causes us humans to behave in a way that’s different from the
everyday norm, especially if we really like the band.

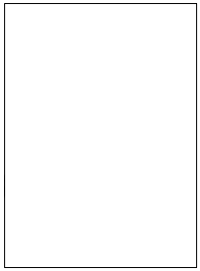
Here’s another scenario.

You’ve had a long hard day and you arrive home exhausted. At home
loud and annoying music plays—something you really hate, like your
dad’s vinyl Barry Manilow, or your kid’s Megadeth Live! CD—and it
grates and grinds on your nerves.

Once it’s turned off, you heave a deep sigh and a peacefulness settles
over you. You put on some of your favorite music—say that Barry
Manilow record, or maybe that rockin’ Megadeth Live! CD—and the
relaxation deepens.

Music therapy has shown positive results in those undergoing cardiac
rehabilitation, and drug rehabilitation. Music has also helped sufferers of
asthma, depression, high blood pressure, migraines and ulcers. Music can
help with the production of melatonin, an important chemical in the body.
The use of music therapy in healing has gained much credibility and its
use is increasing.

Or how about this:



You listen to the Mozart piano sonata in D, and when it’s over your
spatial reasoning intelligence has jumped up several points. You’re
temporarily smarter! Music does affect the brain.

There’s more:

A trained singer breathes deeply, begins a note and holds it. She sings
with power and confidence and clarity. The note is high and clear and
like a laser beam. A tall empty champagne glass sits on a stool nearby

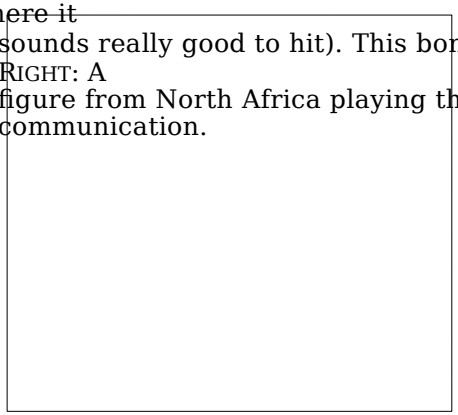
and begins to vibrate with the voice. The voice grows louder. The glass begins to tremble. Then it explodes in a shimmering cascade of shards.

Jane Goodall, the famous chimpanzee expert, relates a story about a chimp who discovered that banging two empty gasoline cans together makes a terribly wonderful racket. In a few days of banging the chimp had become the dominant male of the group. A percussionist's dream.

There is power in sound.

These are only a very few examples of the strange power of music. There are many, many more which you can learn about by reading Don Campbell's book, The Mozart Effect or take a gander at www.amc-music.com/brain.html

How long has music been around? Nobody really knows, but we all
suspect it’s been with us from the beginning.



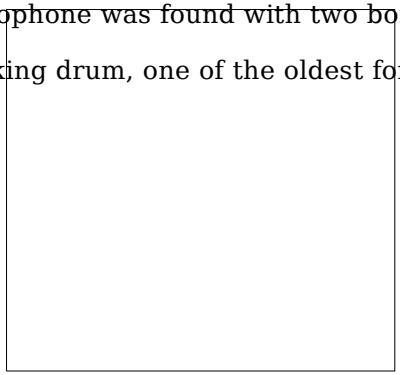


Figure 1.3 LEFT: 35,000 year old mastodon bones with markings for resonance points (places where it
sounds really good to hit). This bone xylophone was found with two bone flutes. RIGHT: A
figure from North Africa playing the talking drum, one of the oldest forms of communication.

Use your imagination to think about what the very first musical experience was. You have about as much chance being correct as anyone,
and it’s fun to imagine.

Sound and music have been with us from the beginning. And, being the
creatures that we are, it was only a matter of time until we developed a
written language which could record these rhythms and pitches so that
others could make them too.

Just like with language, music existed for a long, long time before it was
written down, and some think music existed before spoken language.
Music was taught by rote, which means copying what another has played
or sung. No need to read music, just copy the sounds, the fingerings, or
whatever. It’s a method that takes a lot of time but works well and many,
many people still learn this way.

But with a system of writing, a song could be shared with an audience far
away, played by a musician who could read the lines and squiggles
created by someone she has never met.

Writing Down the Bones

Our western tradition of written music—what you're about to learn—has only been around a thousand years or so, not very long at all in the grand scheme of things.

There are older traditions of written music. Ancient Hindus and then the Greeks made use of the letters of their alphabet to write out music; the Persians used numbers and a kind of staff with nine lines between which the numbers were written; the Chinese used special signs for their pentatonic scales.

But it wasn't until around 500 AD that we see the first glimmer of written western music.

Around this time lived Boethius, a Roman poet and philosopher who wrote a famous Latin treatise on music which was studied throughout the Middle Ages. In it was the first use of Latin letters to represent musical sounds.

Monks in the monasteries of the Catholic Church studied this treatise by Boethius and improved upon his ideas for their own system.

After a few hundred years, in addition to letter names for notes, a system of neumes (pronounced nooms, from the Greek word for sign) were invented. Neumes are signs written above the text of a song which show note length, pitch, and movement from one note to the next.

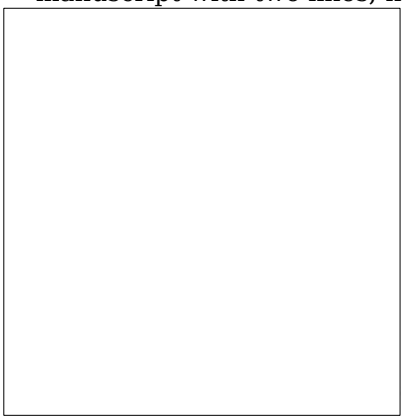
After a while, neumes began to be written on, above, or below a single line. The line represented a specific pitch. A neume written above the line

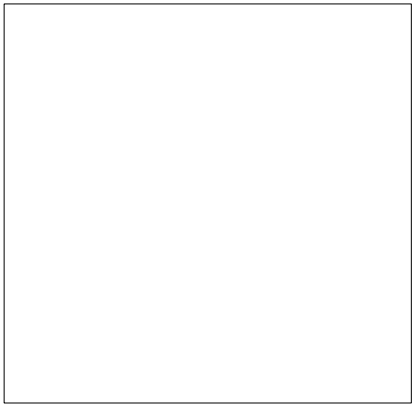
was higher in pitch than a neume written below the line.

Around 1,000 AD many innovations in written music came to be.
Though it isn’t clear who invented them, Guido di Arezzo is given most
of the credit. He was a Benedictine monk who was thrown out of his
monastery for his radical innovations in music. It’s believed that he didn’t
actually invent the staff, but increased the lines from two to four.

We’re lucky he got kicked out of the monastery because it caused his
ideas to be spread more widely. After he had an audience with the Pope
who recognized Guido’s skill, his monastery wanted him back.

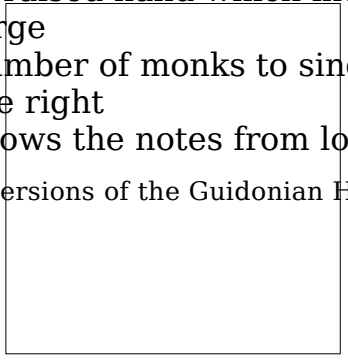
Figure 1.4 LEFT: 9th Century manuscript with neumes written above text. RIGHT: 12th Century
manuscript with two lines, neumes, and text.

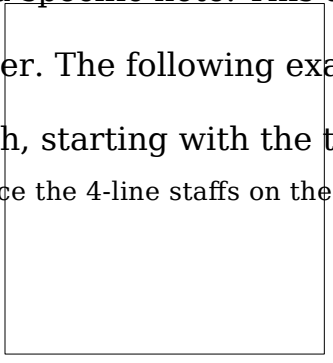




Guido di Arezzo was definitely responsible for adding more lines to the
staff, and he was also thought to have invented the Guidonian Hand, a
system for singing together. He would point to specific places on his
upraised hand which indicated a specific note. This allowed a large
number of monks to sing together. The following example on the right
shows the notes from low to high, starting with the thumb.

Figure 1.5 Two versions of the Guidonian Hand. Notice the 4-line staffs on the left example.





Up until this time most music was monophonic, which means it had only
one part, usually vocal. All of the musical examples which survive from

this time come from the church. There were popular secular (non-
religious) musicians around at the time, but they weren't writing down
what they played and so there is almost no record of it.

An example of monophonic music is a type of song called a plain chant.
Some of the first examples of written western music are plain chants.
They sound more like inflection than singing and are still used in Roman
Catholic churches today. Eventually all those monks got bored with
singing one-line music and began to add other parts. Music was becoming more complex.

Music with more than one part is called polyphonic music. Polyphonic
music soon became popular in the monasteries, but was difficult to write
out.

Because polyphonic music is more complex than monophonic music, it
was necessary to add more lines to show the other voices. This is where
Guido d'Arezzo comes in. He expanded the staff to four lines. Soon after
that a fifth line was added.

Over the next five hundred years, composers experimented with different
systems of writing music. It was written in elaborate shapes and some
times with a six-line staff. By about 1500 we arrived at a system which
has remained nearly unchanged until today.

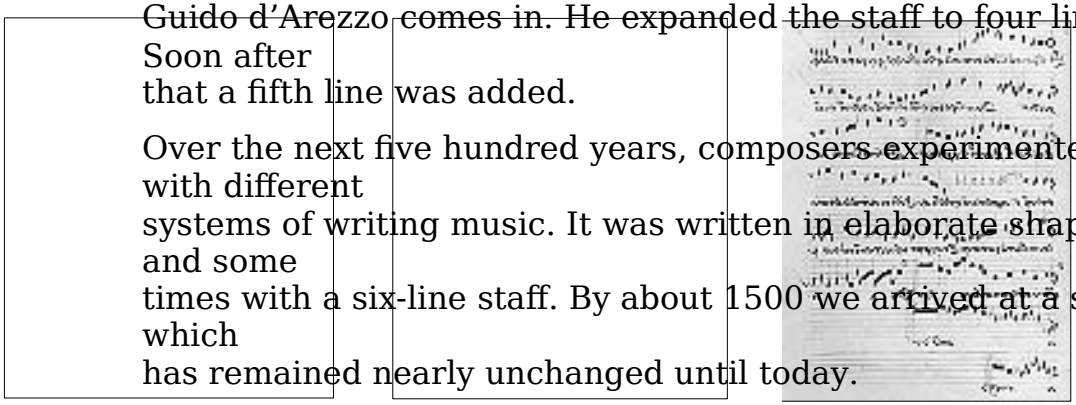
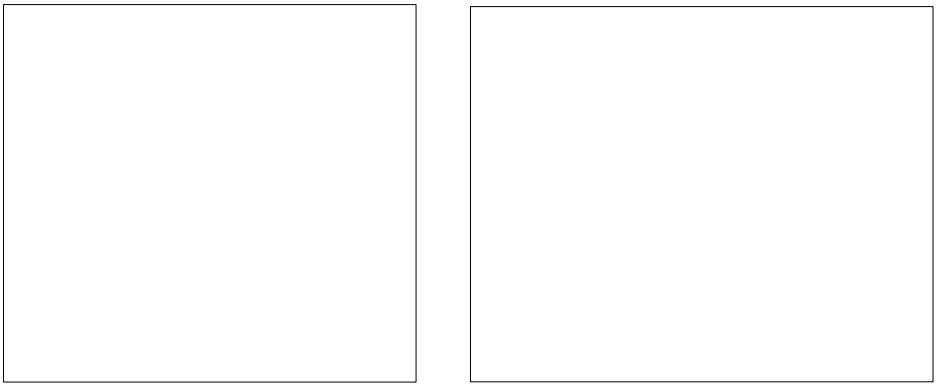


Figure 1.6 LEFT: 4-line staff. MIDDLE: Heart-shaped staff. RIGHT: 6-line staff.

The Future

The spirit of experimentation with written music still exists. Modern composers like John Cage or Stephen Reich use notation which is radically different from what you'll learn in this book.

Figure 1.7 LEFT: Part of John Cage's Piano Concerto. RIGHT: Extension No. 1 by William R. Maginnis, 1964.



Music, like any language, evolves over time. Maybe in another thousand years we'll be reading music based on smells. Who knows? What do you think music will look like and sound like in another thousand years?

Moving On

Now that you have a general idea of the origins of written music, it's time to get down to some specifics.

In Chapter Two you'll learn about the staff: how it's made and what it's used for in music.

CHAPTER

2

LINES, LINES, EVERYWHERE THERE'S LINES

All music is folk music. I ain't never heard no horse sing a song.

— Louis Armstrong

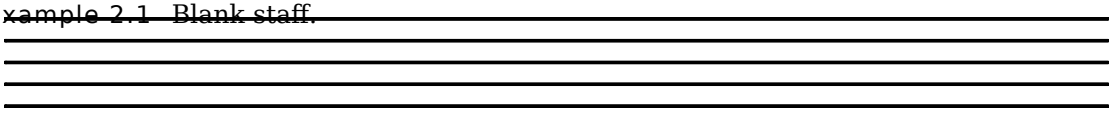
In This Chapter

- The Staff
- Lines
- Spaces
- Study Guide

The Staff

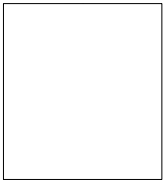
Music is written on a staff (plural staves) which is five horizontal parallel
lines. The five lines create four spaces between them.

Example 2.1 Blank staff.



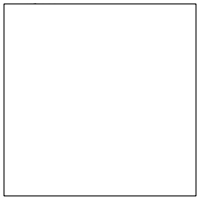
Lines and spaces are numbered from bottom to top.

Example 2.2 Staff with lines and spaces numbered.



Theory Geek Alert

When things are counted in music—staff lines, degrees of a scale,
intervals, even the strings of a guitar (don’t worry if you have no idea
what some of these things are)— they’re always counted from the
bottom up.



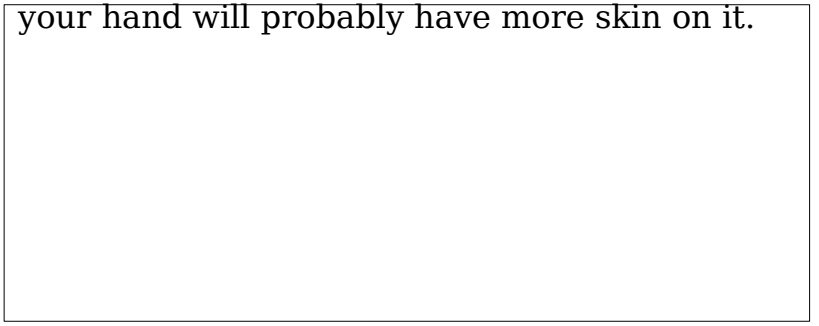
Memory Tip

The following exercise works. It may feel a little silly, but kinesthetic
learning—learning with your body— works.

Take your hand—left or right—and put it up in front of your face with
the palm toward you. Pretend your fingers are the lines of the staff. The
spaces between your fingers are the spaces of the staff. Pinky is line

one, ring finger line two, middle finger line three, index finger line
four, and thumb line five. Between your pinky and ring finger is space
one, etc., etc. Touch each finger and say the number of the line. Do the
same with the spaces.

The example below shows a right hand. The only difference between this example and your hand is that you might use your left hand, and your hand will probably have more skin on it.



Moving On

So much for the staff. Pretty simple so far, right? Stick with it, because most of music theory is pretty easy to understand as long as you've mastered previous chapters.

Coming up next is Chapter 3 in which you'll learn about more lines that are used in written music: bar lines, double bar lines, and leger lines. It's all pretty easy stuff, but you probably guessed that.

Chapter 2 Study Guide

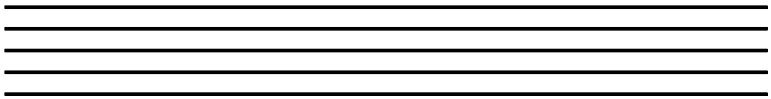
1. How many lines make up the musical staff?

1. 5

2. How many spaces in the musical staff?

2. 4

3. Using a separate sheet of paper and a pencil, draw a musical staff like the one below.
Hint: use a straight edge if you want it to be neat.



4. What is the number of the bottom line? *4. One*

5. What is the number of the top line? *5. Five*

6. What is the number of the bottom space? *6. One*

7. What is the number of the top space? *7. Four*

Practical Use

1. Hold your right hand up in front of your face. Use the other hand to count the lines (your fingertips) starting with the finger closest to the floor as “1.” Count the spaces between your fingers the same way.

2. Draw three five-line staves, each one a different size. Draw in your own type of notes and be as creative as you want to be. Try to discover which size staff works best for you.

3. Photocopy the staff paper in the back of this book (make at least 20 double-sided copies), and use the magnification button on the copier to make the staves bigger or smaller as you see fit.

4. Hole-punch the copied blank staves and make a folder for yourself. You will use it to

keep track of your progress. For less effort, blank manuscript and guitar tablature
notebooks are available commercially.

CHAPTER

3

MORE LINES

Can we ever have too much of a good thing?

— Cervantes, Don Quixote

In This Chapter

- Bar Lines
- Double Bar Lines
- Measures
- Leger Lines

Bar Lines and Double Bar Lines

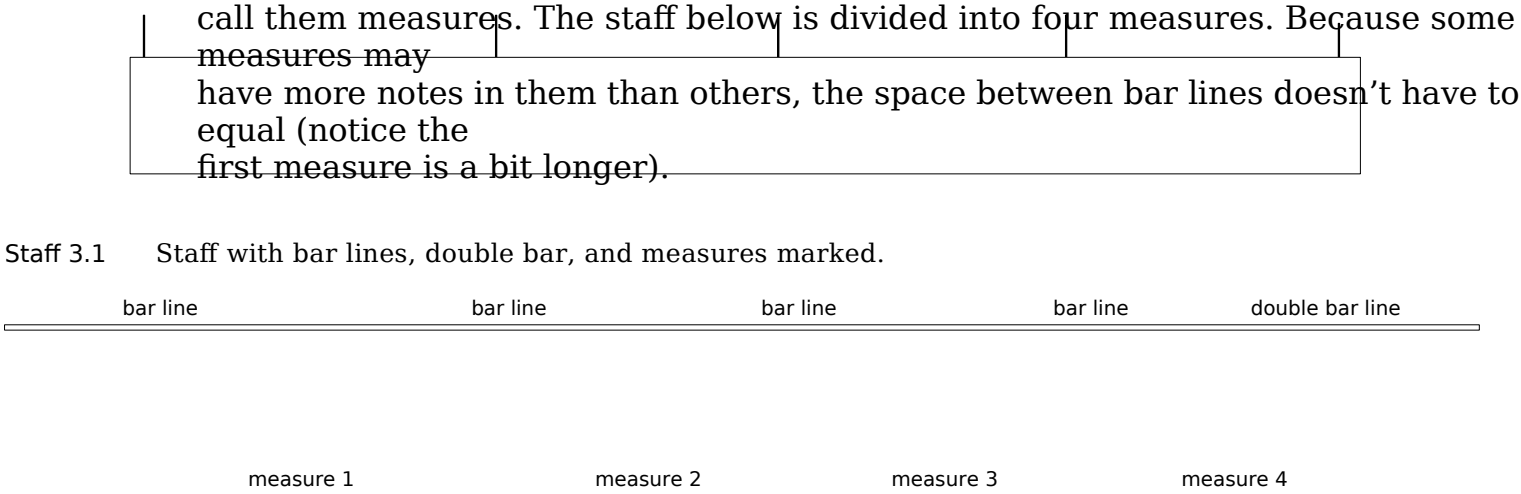
To make music easier to read, the staff is divided into sections by vertical lines called bar lines.
There are two types of bar lines. The single bar line is a single thin line from the top line to the
bottom line. Bar lines simply divide up the staff into small sections which are easier to read. Think of
bar lines as punctuation: you don't hear them, they're there to help with the reading.

The double bar line marks the end of a section, or the end of a song. It has a regular-sized line in
addition to a thicker line close by to the right.

Measure

The area between two bar lines is called a measure, or a bar. To avoid confusion, from here on, I'll
call them measures. The staff below is divided into four measures. Because some measures may
have more notes in them than others, the space between bar lines doesn't have to be equal (notice the
first measure is a bit longer).

Staff 3.1 Staff with bar lines, double bar, and measures marked.



What? **More** Lines?

Learning Leger Lines

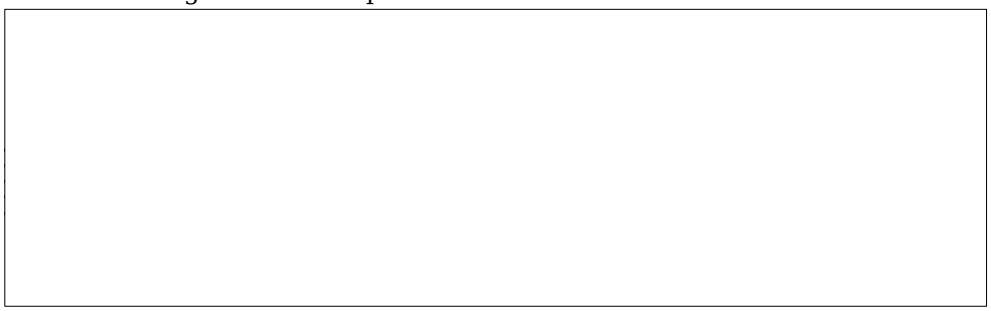
Most notes are written on the staff, but some notes are higher or lower than the staff can show. When
a note goes beyond the range of the staff (higher or lower), small horizontal lines are used to show
where the staff would be if it had more than five lines and four spaces. These are called leger lines
(sometimes spelled "ledger lines").

The words "leger line" appeared around 1700, though the practice of writing leger lines is older. To
keep music from looking cluttered, leger lines are never used unless they're with a note. Below are

some examples which use three different kinds of notes, but don’t worry about them —you’ll learn
what they are soon.

The last two measures show extreme examples which you’ll rarely see, but give you an idea of
what’s possible.

Staff 3.2 Four measures of leger line examples



Moving On

Not too tough, was it? When talking about music, you'll often hear the terms you learned in this chapter: bar lines, double bar lines, measures, and leger lines. Be sure you know the information in the Chapter Review before you go on.

Coming up in Chapter 4 you'll learn about space and line notes and how the highness or lowness of a note is shown on a staff.

If you keep at it, you'll find all the chapters are this easy.

Chapter 3Study Guide

1. What is a bar line used for?
2. Where is a double bar used?
3. On another piece of paper draw a staff. Make it a fairly long one.
4. Divide the staff into four measures (they don't have to be equal length). The bar line should touch the upper and lower lines of the staff without going over.
5. What are leger lines?
6. What are leger lines used for?
7. Draw in some leger lines both above and below your staff. Draw some notes on your leger lines. Use any kind of note.

0. Divides the staff into measures. Makes music easier to read.

0. The end of a section and/or the end of a song.

5. Small lines above and below the staff

5. Used for notes that are higher or lower than the staff

Practical Use

1. Divide a staff into 4 equal measures. Use an entire line of staff paper for these 4 measures. Do the same thing 2 more times (you should have 12 measures total), and put a double-bar line at the end of the last measure.

2. Draw in some leger lines. Use real notes like the ones in example 3.2, or invent your own. Better yet, do both!

CHAPTER 4

THE WIND-UP AND THE PITCH

You can’t think and hit at the same time.

— Yogi Berra

In This Chapter

- Space notes
- Line notes
- High and Low

Spaced Out and Lined Up

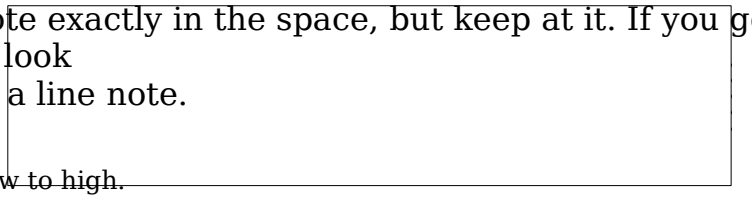
Notes on the staff will be either space notes or line notes. A space note is any note which rests
within a space of the staff without crossing over a line. A line note is any note split through the
middle by a line. Notice in the examples that I've included leger notes.

Practice on the Blank Staff

In the back of the book are two pages of blank staff lines. Please don't tear them out so that others
may also use them. Photocopy the blank staves and practice writing out the techniques and symbols
you're learning. If you write them down you'll be more likely to remember them.

Space Notes

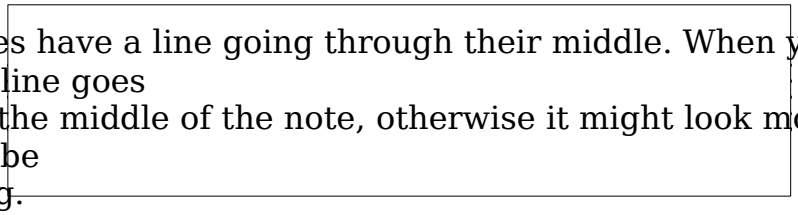
A space note fits within a space on the staff (or between leger lines). At first, it might be tough to
draw a note exactly in the space, but keep at it. If you go over the line, your space note may look
more like a line note.



Staff 4.1 Space notes, low to high.

Line Notes

Line notes have a line going through their middle. When you draw a line note be sure the line goes
through the middle of the note, otherwise it might look more like a space note, and that can be
confusing.



Staff 4.2 Line notes, low to high.

Ah, Togetherness

Line and space notes alternate, one after the other. After a line note comes a space note, and after a

space note comes a line note. I know that’s redundant, and I said it twice, but it’s important. Here’s
what it looks like:

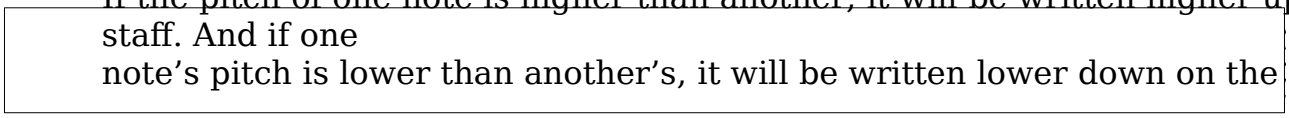
Staff 4.3 Line and space notes combined, low to high (there are notes both higher and lower than those shown here).

The High and the Lowly

Pitch is not only something you find in a tree and at a baseball game. As it relates to sound,
Webster's definition of pitch is: the property of a sound and especially a musical tone that is
determined by the frequency of the waves producing it. Don't you sometimes just hate dictionaries?

What pitch means in music is the highness or lowness of a sound or note.

If the pitch of one note is higher than another, it will be written higher up on the staff. And if one
note's pitch is lower than another's, it will be written lower down on the staff.



Staff 4.4 Examples of low and high.

This note is higher than ..... this one. This note is lower than ..... this one.

Moving On

Okay. You should now have a good handle on line and space notes and how pitch is shown in
written music. Is it all clear? Be sure you've got it before you move on.

Coming up in Chapter 5 you'll learn the musical alphabet and how these letter names are applied to
the lines and spaces and leger lines of the staff.

Chapter 4 Study Guide

1. What is a line note?
2. What is a space note?
3. What does pitch mean in music?
4. If one note's pitch is higher than another, it will be

1. Any note with a line through it

2. Any note lying in a space

3. The highness or low-

written _____ on the staff.

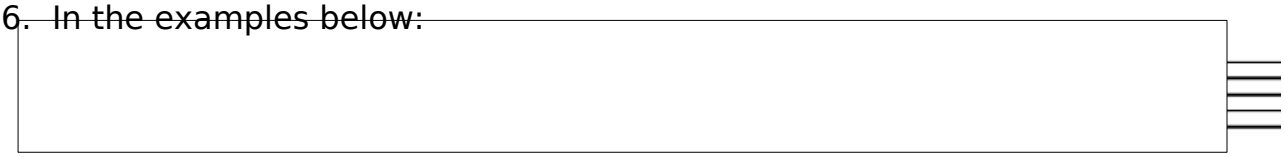
ness of a note

4. Higher

5. If one note's pitch is lower than another, it will be written _____ on the staff.

5. Lower

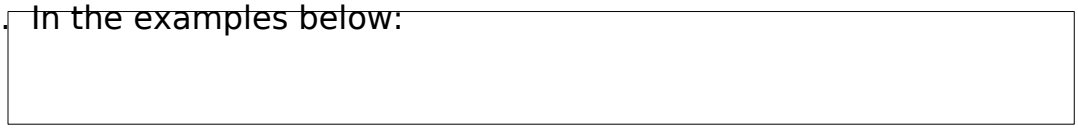
6. In the examples below:



A B C D E F

Note A is _____ than note B.
Note C is _____ than note D.
Note E is _____ than note F.

7. In the examples below:



G A B C D E

Note G is _____ than note A.
Note B is _____ than note C.
Note D is _____ than note E.

6. lower
higher
lower

7. lower
higher
higher

Practical Use

1. In the 12 measures you made in the last chapter, draw in several notes per measure. Vary the highness and lowness. Use leger lines. Go through your example and identify lower and higher from note to note.

2. On a blank staff, draw in all the line and space notes from one leger line below the staff all the way up to one leger line above the staff.

Home, Home on the Ranges

Range refers to the notes an instrument is able to play, from lowest to highest. Each example below
shows the range of an instrument from its lowest note to its highest note. There are some exceptions,
like pedal tones (very low notes) for brass, a low B foot for a flute, you can put your foot into the
bell of a baritone sax and get a half step lower, and other such tricks, but for now don't worry about
those unless you want to.

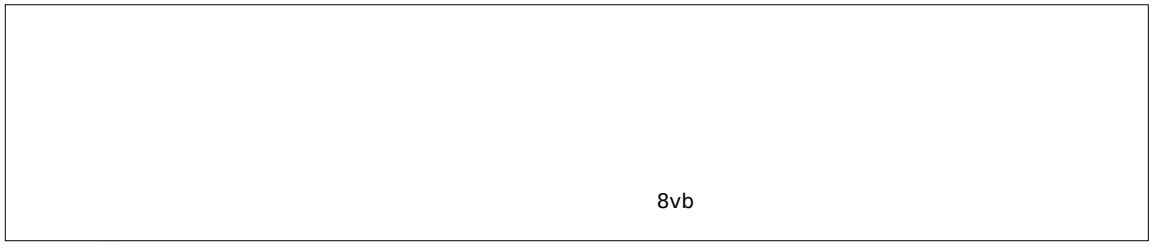
There are many symbols below which you don't know yet, but don't worry about that for now.
You'll learn them soon.

Since voice is an instrument, I'll show vocal ranges first. I'm doing this mostly to show you that all
instruments use leger lines. You didn't believe me, did you?

While you look at these examples, compare the ranges of the instruments. Notice that the highest
note for a soprano is higher than the highest note for an alto; or notice the guitar is able to play lower
than the violin.

Staff 4.5 Ranges for Voice: Soprano, Alto, Tenor, Bass

Staff 4.6 Ranges for: Violin, Guitar, Bass.



Staff 4.7 Ranges for: Trumpet, Alto Sax, Flute, Bb Soprano Clarinet.

CHAPTER 5

A NOTE BY ANY OTHER NAME WOULD SOUND AS SWEET

Sweetest melodies
Are those that are by
distance made more sweet.

— Wordsworth, Personal Talk.

In This Chapter

- The Musical Alphabet
- Note Names
- Naming Leger Line Notes

What's in a Name?

You'll be happy to find you only need the first seven letters of the alphabet for music.

The music alphabet uses A, B, C, D, E, F, and G. You'll never find an "H" in music, or a "Q", or anything other than A through G. This is one of those few rules that has no exceptions!

Remember when we talked about line and space notes coming one after the other? If not, see "Ah, Togetherness" on page 32. The notes are named alphabetically when the notes are written one after the other (line-space-line-space, etc.).

Round and Round

But wait a minute, you're saying, I know there are more than seven notes in music. There are at least 88 on piano keyboard. What are their names?

Good question. After G, the pattern begins again with A. Below is an example showing this.

Don't worry about the things you see that you don't know yet, like the funny-looking symbol at the beginning of the staff; you'll learn it in the next chapter. Focus on the letter names and how they work.

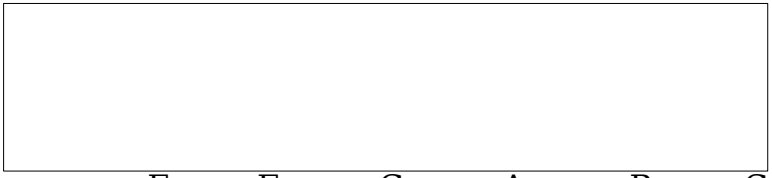
Example 5.1 Note names in the treble clef. Notice the letter change from the 3rd note to the 4th note.

E F G A B C D E F G

Remember Leger Lines?

Notes on leger lines or spaces are named the same way. Following is an example with leger lines below the staff. These are the first 8 notes for both guitar and clarinet. Again, don’t worry about the things we haven’t gone over yet. Focus on the note names only.

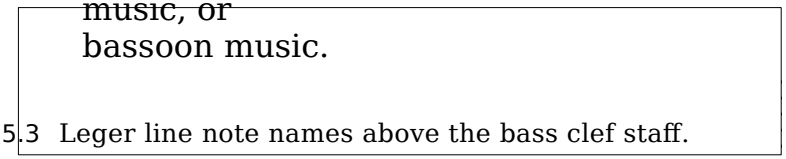
Example 5.2 Leger line note names below the treble clef staff.



E F G A B C

And here are some examples of leger line note names above the staff.
Notice there is a different loopy symbol at the beginning of this music.
Not to fear, you'll learn what that is soon. For now you can ignore it.
These are notes you might find in trombone music, electric bass music, or
bassoon music.

Example 5.3 Leger line note names above the bass clef staff.



C D E F G A

Moving On

Not much to note names, is there? Just remember that A-G repeats over
and over and that's all you need. Make sure you know the information in
the Chapter Review before you go on. Shouldn't be too hard.

This is the end of Part I, so after the review for this Chapter there is a big
fat study guide for all of Part I. Once you've got that info learned, go on
to Part II, which is all about clefs (those odd-looking symbols at the
beginning of the staff). Good luck!

Chapter 5 Study Guide

1. What letters are used to name notes in music? *1. A B C D E F G*

2. What letter comes after G? *2. A*

3. What kind of note comes right before or after a space note? *3. A line note*

4. What kind of note comes right before or after a line note? *4. A space note*

5. Write out five times, “After G comes A.”

6. Can you think of a better system for naming notes? How about using colors? Shapes? Textures? Tastes? Smells? Numbers?

Practical Use

1. Say the letters A-G in a repeated loop as fast as you can. Do the same thing backwards. Say every other letter: A, C, E, G, B etc. Think up another way to say these seven letters.

2. Write the 7 letters out in as many patterns as you can think of. Make shapes with the letters. Be creative with them.

Part I Review

Whew! You Made It.

These pages can be used to test your memory on what you've learned in Part I, and if some of the information hasn't stuck, you can go back and check it out on the page indicated below the question.

As with the chapter reviews, use your keyboard to cover up the answers while you test yourself.

When you think you've got it all down, either take the test in Basic Music Theory Quiz Book, or go on.

The Review

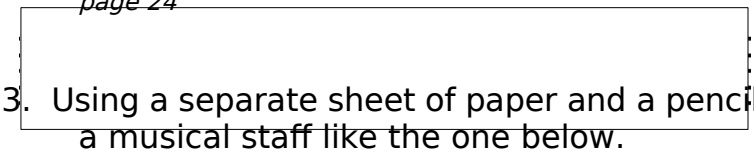
1. How many lines make up the musical staff?
   page 24

   1. 5

2. How many spaces in the musical staff?
   page 24

   2. 4

3. Using a separate sheet of paper and a pencil, draw a musical staff like the one below.



4. What is the number of the bottom line?
   page 24

   4. 1

5. What is the number of the top line?
   page 24

5. 5

6. What is the number of the bottom space?
page 24

6. 1

7. What is the number of the top space?
page 24

7. 4

8. What is a bar line used for?
page 28

8. Divides the staff into measures

9. Where is a double bar used?
page 28

9. The end of a section or song

10. On another piece of paper draw a staff. Make it a fairly long one.

11. Divide the staff into four measures.

12. What is a leger line?
page 28

12. A small line above or below the staff

13. What are ledger lines used for?
page 28

13. Notes that are higher or lower than the staff shows

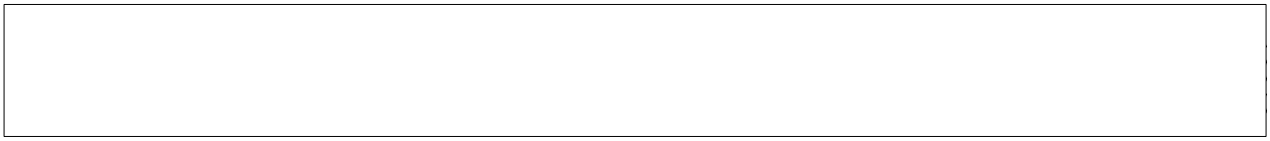
14. Draw in some ledger lines both above and below your staff.

15. What is a line note?
page 32

15. Any note with a line through it

16. What is a space note?
page 32

17. In the example below:
Note A is _____ than note B.
Note C is _____than note D.
Note E is _____ than note F.
page 33



A B C D E F

18. What letters are used to name notes in music?
page 38

19. In the musical alphabet, what letter comes after G?
page 38

16. Any note in a space

17. lower
higher
lower

18. A B C D E F G

19. A

20. In the example below:
Note G is _____ than note A.
Note B is _____ than note C.
Note D is _____ than note E.
page 33

20. lower
higher
higher

21. What kind of note comes right before or after a space note?
page 32

21. A line note

22. What kind of note comes right before or after a line note?
page 32

22. A space note

Moving On

Okay. That was pretty painless, I hope. Once you have this information stored in your little gray cells, take the quiz or move on to Part II, Clef Notes.

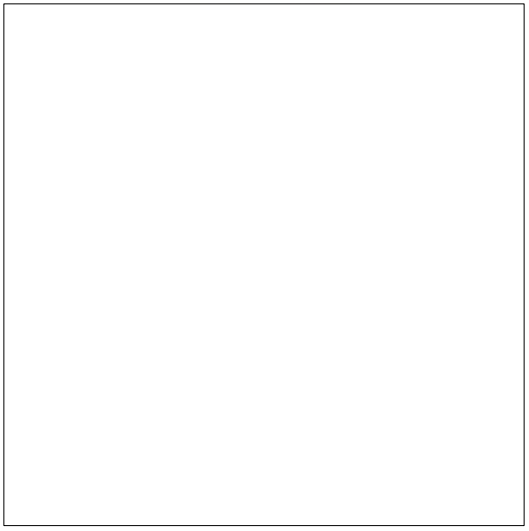
Part II is the shortest Part of the book in which you'll learn about clefs, the odd-looking symbols you've been seeing at the beginning of a staff.

P A RT T W O

Clef Notes

In This Section You Will Learn:

- Clefs in General
- Treble Clef
- Bass Clef
- Rhythm Clef



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CHAPTER

6

GOING OVER THE CLEF

Sometimes it takes a long time to play like yourself.

— Miles Davis

In This Chapter

- What is a Clef?
- What a Clef does
- Types of Clefs

What's a Clef?

A clef is a symbol used at the beginning of a musical staff to tell the reader which letter name goes with which line or space. The word clef didn't show up until around the middle 1500s. Clef is a French word that means key, as in, "Hey man, what key are we in?"

In early music, a letter was written at the beginning of the text of a plainchant (remember monophonic music on page 19?). The letter told the singer which note to start on.

Around 1000 AD some bright soul thought to draw a line from the letter all the way across the page. Then Guido di Arezzo added more lines and we had our staff. Over time, composers made that beginning letter more and more fancy until it no longer looked like a letter at all. That was probably when somebody in France in the middle of the 1500s decided to call them clefs.

There are several different kinds of clefs: C clefs, treble clef, bass clef, and rhythm clef (also called the percussion clef). We'll only be learning the three most common ones: treble clef, bass clef, and the rhythm clef.

Example 6.1 The Clefs.

C Clef Treble Clef

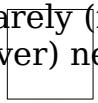
Bass Clef Rhythm Clef

Each clef has something which shows the letter name of one line.
Because you now know how letter names are used in music (A through
G, right?), you can figure out what all the other letters are for that staff
once you know the name of one line. I’ll show you how when we look at
each clef in its own chapter.

For now, just remember a clef points to and names one line of the staff.
I'll show you all the gory details when we go over each clef in its own
chapter.

The Clefs

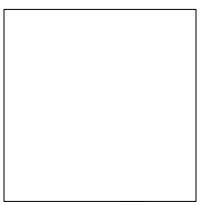
Some clefs are used more frequently than others. We'll get the odd ones
out of the way first so you can forget them more quickly. You'll rarely (if
ever) need them, unless you're a viola player.



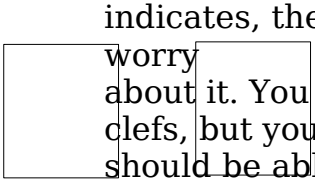
C Clefs

The C clef isn't used much any more, except by viola players and
occasionally trombone and bassoon players.

It's pretty easy to imagine the symbol looks like the letter C, which is
what it used to be. It's also obvious which line is being indicated. That
big arrow pointer in the middle is what tells you which line or space is
C.



The C clef is different than other clefs and can be confusing at first
because it's a moveable clef. Depending on which line the clef indicates, the name of the clef is different. Confused? Don't worry
about it. You don't really need to know much about these clefs, but you
should be able to generally identify them and know what they do. In
case you already forgot, they're C clefs.

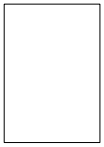


I couldn't resist, so here are the names of the different C clefs. Feel

free to forget them immediately. Except maybe you should remember
that the alto clef is used by viola players.

Example 6.2 The four types of C Clefs.

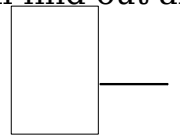
Treble Clef



This is the most common clef. Remember up above when I said each
clef has something about it which tells the letter name of a line? Well,
with treble clef, it's the inner loop which circles the second line and
gives it a name.

What name, you ask? All in good time. No need to rush. You'll find
out soon.

What letter does the treble clef look like? Take a guess now and see if
you're right. You'll find out all these niggling details in the next
chapter.



Example 6.3 The treble clef. Notice how the inner loop circles the second line.

2nd line

Treble clef is used for instruments with a high pitch. Some of them are:
piccolo, flute, clarinet, oboe, guitar, violin, French horn, saxophone,
trumpet, and piano.

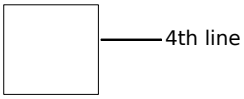
Bass Clef

The second most common clef. The bass clef uses both the head (that

bulbous part) and those two dots to indicate which line it names.

The bass clef was also once a letter. Which one do you think it was?
We'll go over the details in Chapter 9. The only thing to remember at
the moment is that both the head of the bass clef and the dots indicate
the fourth line.

Example 6.4 The Bass Clef. The bass clef indicates the fourth line.



Bass clef is used for instruments with a low sound. Some of them are:
tuba, cello, double bass, trombone, bassoon, electric bass, and piano.

Because of their large range between high and low, keyboard instruments like piano, organ, and synthesizer use both the treble and
bass clefs.

Rhythm Clef

This is a clef which shows rhythms, not pitches like the other clefs.

The real name for this clef is the neutral clef. It's also called the
percussion clef because it's used by percussionists and drummers and
other instruments that produce a sound that isn't a clear pitch. These
types of instruments are called non-pitched instruments.

For clarity's sake, from here on I'll call it a rhythm clef.

Example 6.5 The Rhythm Clef. Notice how this clef carefully avoids indicating any one line?

All the other clefs show the letter name of a line except the rhythm
clef. Because the instruments that use this clef have no clear pitch,

there’s no need for letter names. The rhythm clef was never a letter.
Sound simple? Well, it is and it isn’t. We’ll go over the details of this
clef in Chapter 10.

Some instruments that use rhythm clef are: drum set, small percussion (tambourine, maracas, claves, triangle, vibra-slap, guiro, etc.—the list is nearly endless), snare drum, bass drum, and anything you can hit to make a sound. A percussionist's instruments are everywhere!

Moving On

Okay, once you've got the general details of clefs down, you'll be ready to chew more deeply into the juicy specifics of each clef. We'll start with treble clef in Chapter 8.

Chapter 6 Study Guide

1. What did clefs used to be?

2. About when and where was the word *clef* first used?

3. What does a clef do?

4. What are the three most common clefs?

5. Which line does the treble clef name?

6. Which line does the bass clef name?

1. A letter at the beginning of a piece of music indicating a specific note.

2. Mid-1500s, France

3. Names a line of the staff, thereby setting the names of the other lines and spaces.

4. Treble clef, bass clef, rhythm clef.

5. 2nd

6. 4th

6: Going Over the Clef

7. Which instruments use the rhythm clef?

7. Drums and other non-pitched instruments.

8. Which line does the rhythm clef name?

8. None.

9. On any scrap of paper, draw five treble clefs.

10. On the same piece of paper, draw five bass clefs.

11. On the same piece of paper, draw five rhythm clefs.

12. Name two instruments which use treble clef.

12. Some possibilities: flute, piano, guitar, trumpet, sax, piccolo, violin, F horn, oboe, clarinet, accordion

13. Name two instruments which use bass clef.

13. Some possibilities: trombone, tuba, piano, bass guitar, acoustic bass, electric bass, bassoon, baritone, euphonium, timpani/kettle drum, double tenor steel drum...

14. Go make yourself a snack.

14. Something with cheese in it

Practical Use

1. On your copied staff paper draw a line of treble clefs, a line of bass clefs and a line of rhythm clefs. Experiment. See how fast you can make each one and still have it look like a clef.
2. If the 4th line is F, name all the other lines and spaces.
3. If the 2nd line if G, name all the other lines and spaces.
4. Invent your own clef.

CHAPTER 7

NO TROUBLE WITH TREBLE

The flute is not an instrument which has a good moral effect; it is too exciting.

— Aristotle, Politics

In This Chapter

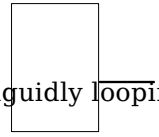
- The Treble Clef
- The Letter G
- Notes on the Treble Clef Staff
- Mnemonic Devices for Lines and Spaces

Golly G

Okay, I’m sure you’re dying of suspense. The treble clef used to be the
letter G.

You can kind of see its “g-ness” if you use some imagination. The treble
clef is also called the G clef because it shows where the note G is on the
staff.

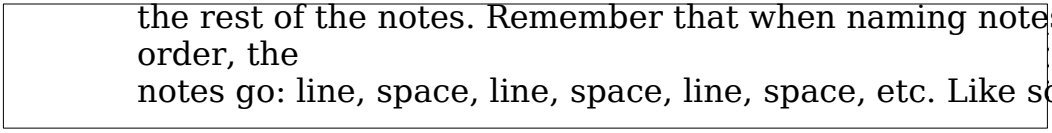
The inner loop of the treble clef circles the second line and thus names it
G.



Example 7.1 The treble clef, languidly looping line two.

G

Once you know where “G” is, use the musical alphabet (A-G) to fill in
the rest of the notes. Remember that when naming notes in order, the
notes go: line, space, line, space, line, space, etc. Like so:



Example 7.2 The treble clef note names, alphabetically from the bottom line to the top of the staff.

E F G A B C D E F G

What? You Want it Easier? Okay.

Instead of memorizing that long string of letters above, you can memorize two short strings of letters. Five letters for the lines, and four

letters for the spaces.

A mnemonic device will make it even easier.

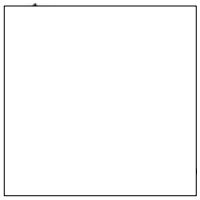
A What Device?

Mnemonic (the first m is silent) came from a Greek word meaning to remember. A mnemonic device is a trick you can use to remember a long series of things—grocery lists, test answers or, in this case, note names.

Use a mnemonic device to learn the names of the lines and spaces. Usually the sillier, crazier or weirder the sentence you make up, the easier it is to remember.

Mnemonics for Treble Clef Lines

Example 7.3 The treble clef line-names.

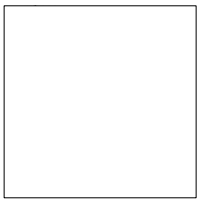


E G B D F

Empty	Elephants	Every
Garbage	Go	Good
Before	Backwards	Boy
Dad	Down	Deserves
Flips	Freeways	Fudge

Mnemonics for Treble Clef Spaces

Example 7.4 The treble clef spaces.



F	F arting	Frequent
A	A lways	Asking
C	C auses	Can
E	Enemies	Enlighten

Take a couple minutes to come up with your own mnemonic device. If you make up your own, you're more likely to remember it. But, if nothing comes to you, memorize one from above that you like.

If you come up with some good ones, send them to me: jonathan@QuestionsInk.com and I'll put the best ones in the next edition of Basic Music Theory and give you credit for your ideas.

Moving On

Because so many instruments use treble clef, it's important to learn this clef even if you're instrument uses another type of clef. Once you understand this clef and how it names the second line, you'll be ready for Chapter 8, which shows you all the fascinating details of the bass clef.

Chapter 7 Study Guide

1. What letter did the treble clef used to be? *1. G*

2. The inner loop of the treble clef circles which line?

2. 2nd

3. What is a mnemonic device?

3. A trick to improve memory

4. What letter name does the treble clef give to the 2nd line?

4. G

5. On a piece of blank staff paper, draw a dozen treble clefs. Try them in different sizes. Try to loop the second line of the staff.

6. What is another name for the treble clef?

6. G clef

7. What are the names of the treble clef lines?

7. E G B D F

8. What are the names of the treble clef spaces?

8. F A C E

9. What is your mnemonic device for remembering the lines of the treble clef staff?

10. What is your mnemonic device for remembering the spaces of the treble clef staff?

Practical Use

1. Put your right hand up in front of your face, palm outward. Use your left hand to point to the fingertips and "valleys" of the right hand fingers. Say each line/space name as you touch it.

2. In your notebook of staff paper, write in the line and space numbers. Draw a treble clef and then write the correct letter names in the lines and spaces. Also name two leger lines above the staff, and two leger lines below the staff.

7: No Trouble with Treble

CHAPTER

8

THE BASS OF THE CLEF

Never look at the trombones. You'll only encourage them.

— Richard Strauss

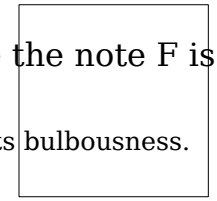
In This Chapter

- The Bass Clef
- The Letter F
- Names of Bass Clef Lines and Spaces
- Nmore Mnemonics for the Lines and Spaces

This Clef is Not a Fish!

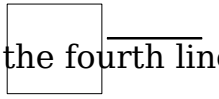
Remember clefs used to be letters way back when? Well, bass clef is no exception (by the way, this bass is not a fish. This kind of bass is pronounced base).

The bass clef used to be the letter F until those nutty artistic-type composers kept messing with it, making it fancier and fancier until we got what we have today, something that looks nothing like an F. And even though it looks nothing like an F, it's called the F clef because it shows us where the note F is on the staff.



Example 8.1 The bass clef in all its bulbousness.

The bass clef tells us that the fourth line is an F in two ways. The first way is the head of the clef, the round part at the top left of the clef. It's smack-dab on the fourth line. In case that isn't enough, there are also two little dots which straddle the fourth line as if they're saying, "Hey! Hey You! This is an F!"

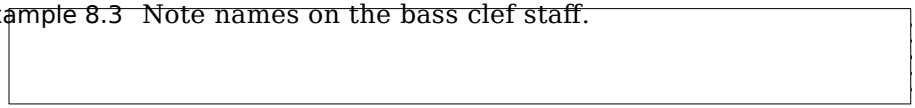


Example 8.2 The bass clef as it sits on the staff. Notice the 4th line?

8: The Bass of the Clef

Okay, you know the drill. Now that you know the name of that one line,
you can apply the musical alphabet to all the spaces above and below it.

Example 8.3 Note names on the bass clef staff.



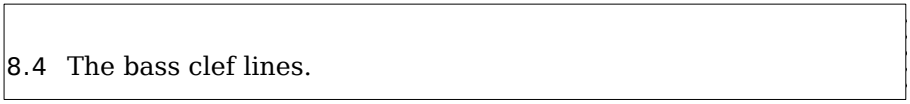
G A B C D E F G A

Nmore Mnemonics

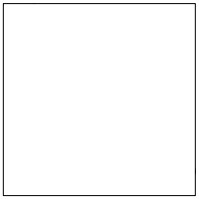
Here are some more memory tricks to remember the bass clef line and
space names.

Mnemonics for Bass Clef Lines

Example 8.4 The bass clef lines.



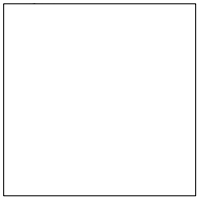
G B D F A



Good	Great	Goofy
Bubbles	Big	Babies
Do	Dinosaurs	Do
Fizz	Fight	Funny
Always	Always	Acts

Mnemonics for Bass Clef Spaces

Example 8.5 The bass clef space names.



A	A ll	All
Cat's	Cows	Cars
Eyes	Eat	Eat
Glow*	Grass	Gas

*Created by Erin Downey of Big Lake, Alaska.

Make Up Your Own

Take a couple minutes to make up your own mnemonic device for the bass clef lines and spaces. If you make your own, and make it wacky, it'll be easier to remember.

Send good ones to me: jonathan@QuestionsInk.com. I'll put the best ones in the next edition of this book and give you credit for them.

Moving On

Even if you're instrument uses a different clef, it's still good to know bass clef. Once you've got it memorized, you're ready for Chapter 9 in which you'll learn about the rhythm clef.

8: The Bass of the Clef

Chapter 8 Study Guide

1. What letter did the bass clef used to be?

1. F

2. Which staff line goes between the two dots of the bass clef?

2. 4th

3. Which line is the bass clef head on?

3. 4th

4. What letter name does the bass clef give to the fourth line?

4. F

5. On a scratch piece of paper, draw a dozen bass clefs. Don't forget the dots!

6. What are the names of the bass clef lines?

6. G B D F A

7. What are the names of the bass clef spaces?

7. A C E G

8. What is another name for the bass clef?

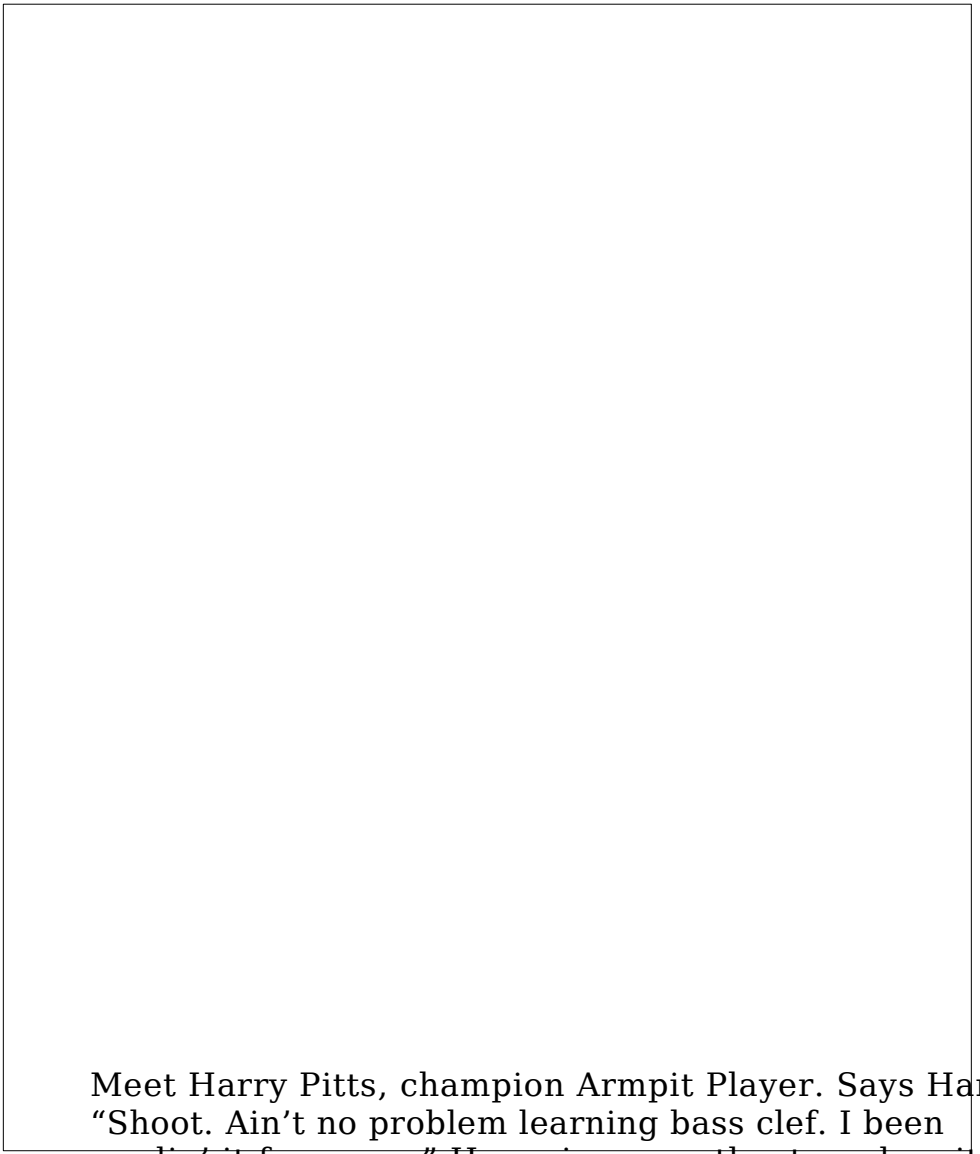
8. F clef

9. What is your mnemonic device for remembering the bass clef lines?

10. What is your mnemonic device for remembering the bass clef spaces?

Practical Use

1. Draw a bass clef upside down. Backwards. Sideways. Inside out. Correctly.
After the correct bass clef, write in the letter names for the lines and spaces.
Name two high leger lines, and two low ones.



Meet Harry Pitts, champion Armpit Player. Says Harry, “Shoot. Ain’t no problem learning bass clef. I been readin’ it for years.” Harry is currently at work writing out Gershwin show tunes in bass clef for his instrument.

CHAPTER

9

TO FATHOM THE RHYTHM CLEF

I like to see you move with the rhythm;
I like to see when you're dancin' from within.

— Bob Marley

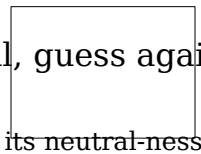
In This Chapter

- The Rhythm Clef
- The Single Line Rhythm Clef
- The 5-Line Rhythm Clef
- The Drum Set
- Mno mnemonics!

No Letters With this Staff

Unlike the other clefs, the rhythm clef doesn't show pitch (the high and low of notes), so there is no need for letter names. The rhythm clef shows rhythms. Go figure.

This clef didn't start out as another letter, because no letters are used with the rhythm clef. Doesn't this sound like this should be easier than treble or bass clef? Well, guess again….



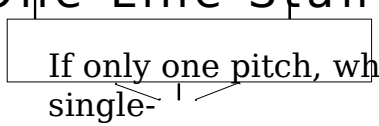
Example 9.1 The rhythm clef in all its neutral-ness.

Why No Note Names?

Remember that note names show what pitch a note is? If not, take a look at "The High and the Lowly" on page 33 for information about pitch, and look at example 5.1 on page 38.

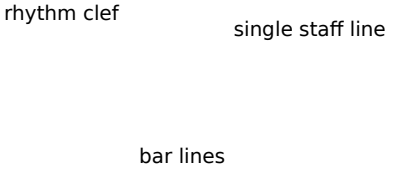
Percussion instruments, most of them, don't have definite pitches like other instruments do. Compare the sound of a flute to the sound of a drum. Flute is an instrument with high notes and low notes and everything in between. A drum has only one pitch.

The One-Line Staff with Rhythm Clef



If only one pitch, why not only one line? Great question. Some single-instrument percussion music is written on one line. The line looks something like this:

Example 9.2 Single staff line with rhythm clef.



To Fathom the Rhythm Clef

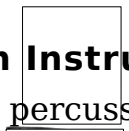
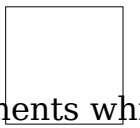
Instruments, not Pitches

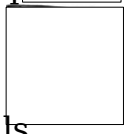
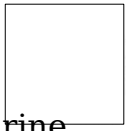
You might be wondering, “Why not always use just one line?”

Beginners often use one line when playing snare drum, or bass drum
because it’s easier to read. But soon one line isn’t enough. Percussionists
have dozens of instruments to learn, and there are usually many more
than two instruments used in a song, and they all need a place on the
staff.

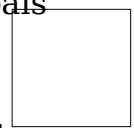
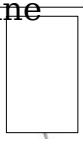
Some Percussion Instruments

These are just a few percussion instruments which use the rhythm clef:

Crash cymbals Tambourine Triangle

Woodblocks Gong Bass Drum

Snare Drum Castanets
Suspended
Cymbal

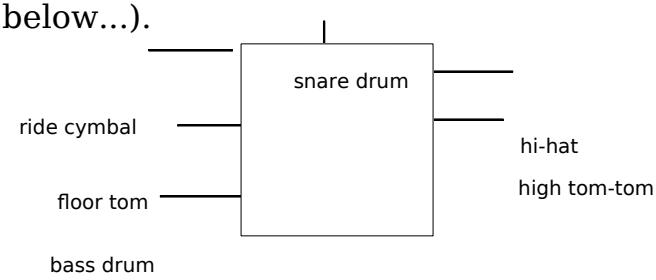
The 5-Line Staff with Rhythm Clef

The drum set has at least three instruments, and usually many more.
We’ll use the drum set as a focus to learn the 5-line staff with rhythm
clef.

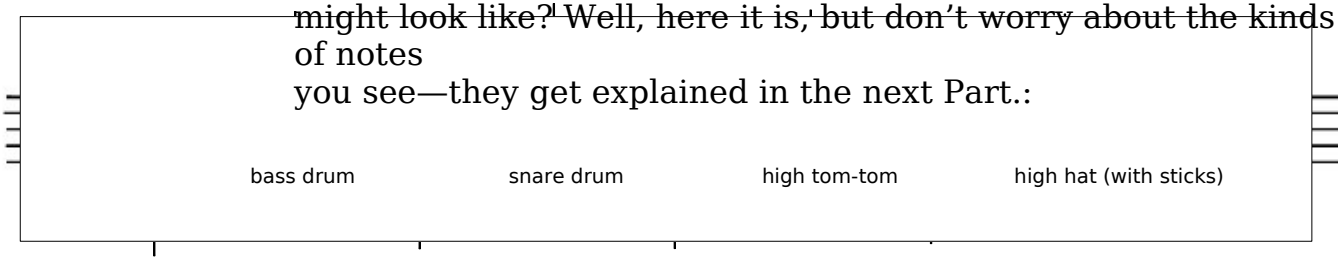
Though many people play with less, the typical drum set has 8 or 9
instruments: snare drum, bass drum, hi-hat, suspended/crash cymbal(s),

ride cymbal, high tom-tom, middle tom-tom, and low tom-tom. Most

people know what a drum set looks like. If not, here you go (extra points
if you can name the parts that are missing in the drum set below...).



In order to read music for the drum set, the drummer has to know where
each instrument is written on the rhythm staff. Curious about what that
might look like? Well, here it is, but don't worry about the kinds of notes
you see—they get explained in the next Part.:



For example, rhythms for the bass drum will always be written on that
first space. Rhythms for snare drum will always be written on the third
space. Etcetera, etcetera.

X Marks the Cymbal Spot, Maybe

The x notes in a rhythm clef usually show the cymbal part, but they can
also be used to show the triangle part, or the cowbell part, or any other
small percussion instrument.

Instruments and where they are on the staff are usually defined at the
beginning of a piece of music, and what shows a triangle in one piece
may be used for cowbell in a different song. It’s always best to check
the beginning directions to be sure.

Moving On

We won't be seeing much of the rhythm clef in this book, but it's
important to know, especially if you're interested in drums and percussion instruments.

That's the end of this Part. It was a short one, but the information is
essential to everything which follows, so if there's something you don't
understand, go back and review until you've got it.

After the review for this chapter is the big fat review for the entire Part.

The next part is called You Got Rhythm, and goes over the notes you've
been seeing: their names, their anatomy, and their length.

Chapter 9 Review

1. What does the rhythm clef show?

No

2. Why doesn't the rhythm clef show pitch?

Drums/percussion

3. Why use a one-line rhythm clef?

4. If the 5-line rhythm clef staff doesn't show pitches, why is it used?

5. If a note-head is an *x*, what instrument is used?

1. *Rhythm only.*

pitches

2. *are non-pitched instruments*

3. *One line is all that's needed for a single percussion instrument.*

4. *The 5-line clef can show rhythm for several instruments at once.*

5. *Options: cymbals, cowbell, triangle, guiro, any small percussion instrument*

6. If you're reading say, a bass drum part, and it's on the first space, will it ever change to another line or space within that piece?

6. NO!

7. Did you hear about the drummer who locked her keys in her car?

7. It took an hour to get the bass player out.

Practical Use

1. In your staff-paper notebook, write a percussion clef. Write out the correct name of the instrument in the appropriate line/space of your staff. If necessary, look at page 70 to get it right.

2. Get on the "throne" of a drum set. Play each instrument of the set while looking at the appropriate space in your music from example 1. Try two instruments/drums at once. Then three. Then all four.

Part II Review

Whew! You Made It.

These pages can be used to test your memory about what you've learned in Part II, and if some of the information hasn't stuck, you can go back and check it out on the page indicated below the question.

As with the chapter study guides, use your keyboard to cover up the answers while you test yourself.

When you think you've got it all down, either take the test in Basic Music Theory Quiz Book, or go on.

The Review

1. What did clefs used to be?
   page 48

1. A letter at the beginning of a piece of music

2. About when and where was the word *clef* first used?
   page 48

2. Mid-1500s, France

3. What does a clef do?
page 48

3. Shows the letter name of a staff line

4. What are the three most common clefs?
page 48

4. Treble clef, bass clef, rhythm clef

5. What does the rhythm clef show?
page 51

5. Rhythm only. No pitches

6. Why doesn't the rhythm clef show pitch?
page 51

6. Drums/percussion are non-pitched instruments

7. Why use a one-line rhythm clef?
page 68

7. One line is all that's needed for a single percussion instrument.

8. If the 5-line rhythm clef staff doesn't show pitch, why is it used?
page 69

8. To show the rhythm for several instruments at once

9. If a note-head is an *x*, what instrument is used?
page 70

9. Options: cymbals, cowbell, triangle, guiro, any small percussion instrument

10. If you're reading a bass drum part and it's on the first space, will it ever change to another line or space within that piece?
page 69

10. No

11. Which line does the treble clef name?
page 50, page 56

11. 2nd

12. Which line does the bass clef name?
page 50, page 62

12. 4th

13. What letter did the bass clef used to be?
page 62

13. F

14. What instruments use the rhythm clef?
page 51 page 69

14. Drums and other non-pitched instruments

15. Which line does the rhythm clef name?
page 68

15. It doesn't show letter names

16. On a scratch piece of paper, draw five treble clefs.
page 56

17. On the same piece of paper, draw five bass clefs.
page 50

18. On the same piece of paper, draw five rhythm clefs.
page 68

19. What letter did the treble clef used to be?
page 56

19. G

20. The inner loop of the treble clef circles which line?
page 56

20. 2nd

21. What is a mnemonic device?
page 56

21. A trick to improve memory

22. What letter name does the treble clef give to the 2nd line?
page 56

22. G

23. What is another name for the treble clef?
page 56

23. G clef

24. What are the names of the treble clef lines?
page 57

24. E G B D F

25. What are the names of the treble clef spaces?
page 58

25. F A C E

26. What is your mnemonic device for remembering the lines of the treble clef staff?
page 57

27. What is your mnemonic device for remembering the spaces of the treble clef staff?
page 58

28. Name two instruments that use treble clef.
page 50

28. Possibilities: flute, piano, guitar, trumpet, sax, piccolo, violin, F horn, oboe, clarinet, accordion...

29. Which staff line goes between the two dots of the bass clef?
page 50 page 62

29. 4th

30. Which line is the head of the bass clef on?
page 50 page 62

30. 4th

31. What letter name does the bass clef give to the fourth line?
page 62

31. F

32. What are the names of the bass clef lines?
page 63

32. G B D F A

33. What are the names of the bass clef spaces?
page 64

33. A C E G

34. What is another name for the bass clef?
page 62

34. F clef

35. What is your mnemonic device for remembering the bass clef lines?
page 63

36. What is your mnemonic device for remembering the bass clef spaces?
page 64

37. Name two instruments that use bass clef.
page 50

37. Possibilities: trombone, tuba, piano, bass guitar, acoustic bass, electric bass, bassoon, baritone, euphonium, timpani/kettle drum, double tenor steel drum...

Moving On

The info in the past Part is very important, so I hope you've got it down. If you're taking
the Quiz for this part, good luck!

Coming up next we'll begin to learn note types and how long they are. You'll learn
whole notes, half notes, and quarter notes, time signatures, and more.

CHAPTER 10

Interlude

Musical Terms

The mind is a musical instrument with a certain range of tones, beyond which in both directions we have an infinite silence.

— John Tyndall (1820 - 1893)

In This Interlude

- Musical Terms
- Tempo Markings
- Dynamic Markings
- Articulation Markings

Musical Terms are Directions

Music can be loud or soft; notes can be short or long or anywhere in between; a musical phrase can be played sweetly or crassly, smoothly or choppily; and music can be played at many different speeds from sleepily slow to furiously fast.

The performer needs to know this information, and in most music the information is written in Italian.

Why Italian?

Way back when, beginning in the late 1500's, there was a lot of music-making going on in Italy, and at the time, some bright soul thought to write these detailed instructions on the music. Because the composers were Italian, the instructions were written in, you guessed it, Italian.

You'll occasionally see some terms in German and French and even English (especially if you play a piece by Percy Grainger), but the vast majority of musical terms are in Italian.

Following are many Italian terms that are applied to music. They're grouped by category: tempos (how fast to go), dynamics (how loud or soft to play, articulations (how short or long a note is), general terms, and terms for special types of repeats.

Tempo

Tempo is an Italian word which comes from the Latin tempus which means time.

In order to understand these tempos (some people say tempi for the plural), we'll refer to the metronome and how many beats per minute each tempo is. To review the metronome, see "The Metronome (or: The Torture Device)" on page 152. Most metronomes have these markings listed somewhere on them.

Here are the most common tempos, from slowest to fastest:

Tempo Name	Beats Per Minute
Largo	40-60
Larghetto	60-66
Adagio	66-76
Andante	76-108
Moderato	108-120
Allegro	120-168
Presto	168-200
Prestissimo	200-208

Tempo-related Terms

There are other terms that affect the tempo of a piece. They are:

accelerando (accel.) = speed up gradually.

allargando (allarg.) = slow down and grow louder.

ritardando (rit.) = slow down gradually.

rallentando (rall.) = slow down gradually.

Dynamics

Dynamics is another word for how loud or soft to play. The base words to remember for dynamics are piano (quiet) and forte (loud). All of the dynamic markings are variations of these two words. You'll see what I mean. Often in music, you'll see an abbreviation of the dynamic, shown in the following chart in parentheses.

Dynamic Marking	Meaning
pianissimo (pp)	very quiet
piano (p)	quiet

Dynamic Marking	Meaning
mezzo piano (mp)	medium quiet
mezzo forte (mf)	medium loud
forte (f)	loud
fortissimo (ff)	very loud

Grow Gradually

In the Romantic era—around 1800—composers began writing music
which contained sections that would grow gradually louder or softer.
Up until this time, dynamic changes were usually abrupt. This new
technique needed a name. What did they do? They used Italian of
course.

To grow gradually louder is to crescendo (kra-SHEN-doe), and to
grow gradually softer is to decrescendo (DEE-kra-SHEN-doe). Below
are the symbols used to show this:

You may also see the abbreviations cresc. or decresc.

---

crescendo decrescendo

Another term for becoming gradually quieter is diminuendo (dim.).

Articulations

Articulation is a fancy way to say note length. Depending on your
instrument, there are many ways to change the length of a note. For
example, with wind instruments the breath and the tongue are used; for

bowed instruments like violin, viola, cello and double bass, the bow is
used; for piano (the instrument, not the dynamic) articulation is controlled by how long the keys are held down.

Articulations are indicated with a symbol which appears either above or
below the note head. Articulations can also be shown by simply writing
out the whole word under the notes to be affected.

Articulations may also be combined. For example, an accent with a
legato would be a very short accent.

Articulations (symbol)	Meaning
accent (>, ^)	note given more emphasis
legato (—)	play the note full value
staccato (.)	short

Example 10.1 Notes with various articulations.

Of Ties and Slurs

Two more types of articulations seen quite frequently are ties and slurs.

Technically, ties aren't really a form of articulation, but because they
look exactly like slurs but for one important difference, I'm introducing
them together.

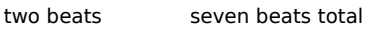
A tie is a curved line connecting two or more notes of the same pitch.

A slur is a curved line connecting two or more notes of different
pitches.

The Tie

Just like tying one piece of string to another gives you a longer piece of
string, so tying two notes together makes a longer note. There is no
break between tied notes. Ties are often used to join notes over the bar
line.

Example 10.2 Some tied notes.



The Slur

Notes of different pitches with the curvy line over or under them are
articulated as smoothly as possible. For wind players, this means no
tonguing; for piano players it means you hold the keys down for each
note down as long as possible; for guitar players it means hammer-ons
and pull-offs; for bowed instruments, the notes happen in the same
bow stroke. Whatever your instrument, the idea is to make a slur as
smooth as possible.

Example 10.3 Some slurred notes.

General Musical Terms

The terms you've been introduced to in the last few pages are often
paired with other Italian words, giving you more specific directions.
Below are the most common ones.

Term	Meaning
al	to the
con	with
fine (pronounced FEE-nay)	the end
molto	very, much
poco	little
sempre	always

For example, molto ritardando means slow down a lot; sempre staccatto

means notes are always short.

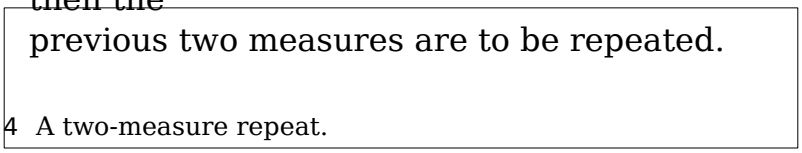
If you find a term you don’t know, you can look it up in the glossary of terms at the back of this book. It’s a good idea to have a pocket dictionary of terms in your instrument case. Hal Leonard Publishing makes a good small one.

Pete and Repeat

Almost all music has repetition. A single measure may be repeated, a small section, or a large section. There are several ways to indicate these repeats in a piece of music.

Repeat a Single Measure

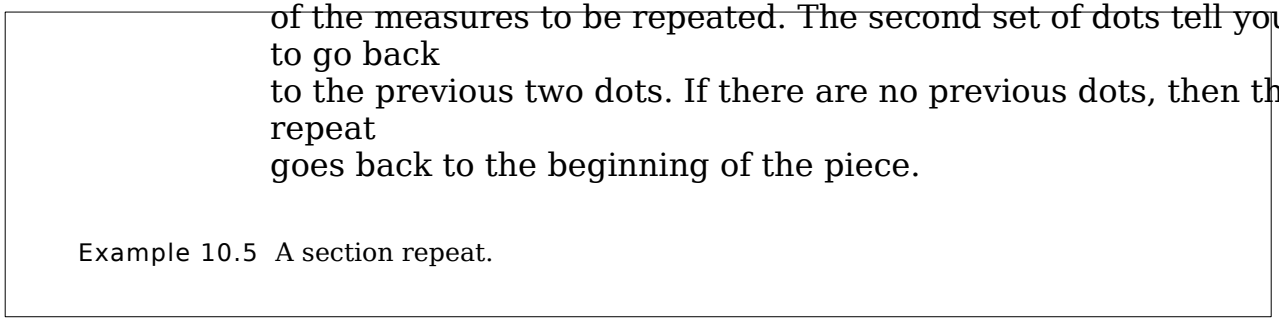
The following sign is used to show that a specific measure is to be repeated: . If there is a number with this sign, say a “2”, then the previous two measures are to be repeated.



Example 10.4 A two-measure repeat.

Section Repeat

A section repeat is shown with two sets of dots at the beginning and end of the measures to be repeated. The second set of dots tell you to go back to the previous two dots. If there are no previous dots, then the repeat goes back to the beginning of the piece.



Example 10.5 A section repeat.

First and Second Endings

Sometimes a section is repeated, but has a different ending the second time around. The first time through the section, play to the repeat sign and return to the previous repeat sign (or the beginning, as in the example below). The second time through, skip the first ending which begins under the bracket with the number “1”, and play the second ending.

Example 10.6 First and second endings. In this example the first ending repeat returns to the beginning.

1 2

More Complex Repeats

The following terms and symbols show more complicated types of repeats.

Term	Meaning
Da Capo al Fine (D.C. al Fine)	Go back to the beginning and play to the fine.
Del Segno al Fine (D.S. al Fine)	Return to the sign ( ) and play to the fine.

Coda ( )	A closing section of a piece of music.

TERM	MEANING
Da Capo al Coda (D.C. al Coda)	Go back to the beginning and jump to the coda section at the coda sign ( ).
Del Segno al Coda (D.S. al Coda)	Return to the sign( ) and jump to the coda section at the coda sign .

Moving On

As you can tell, there are many, many terms to know. If you look in the glossary in the back of this book, you'll find even more. While I was researching terms for the glossary, I learned several that I hadn't known before, and I've been playing music for over twenty years.

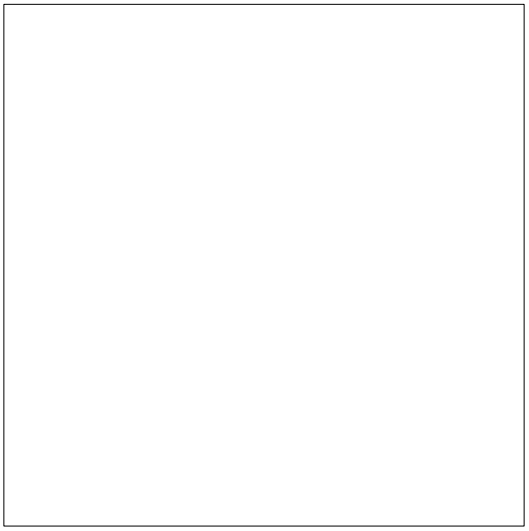
Unless you have a photographic memory, it's a good idea to keep a pocket dictionary around in case you come across terms like, grave, con moto, leggerio, senza sordino, or other strange utterances.

PART THREE

You Got Rhythm

In This Section You Will Learn:

- The Beat
- Whole Notes
- Half Notes
- Quarter Notes
- Eighth Notes
- Sixteenth Notes
- Rests
- Time Signatures
- Counting System
- Dotted Notes



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CHAPTER 11

WHERE'S THE BEAT?

Days full of wanting.
Let them go by without
worrying that they do.
Stay where you are inside
such a pure, hollow note.

— Rumi

In This Chapter

- The Beat
- Whole Note
- Half Note
- Quarter Note
- Note Anatomy 101
- Note Stems: Up or Down?

The Beat Goes On

The beat of nearly any piece of music is easy to feel. It's what sets your toe tapping, it's what makes you dance. The beat is a regular pulse, like your heartbeat, which lasts throughout a piece of music.

Speaking of pulse, did you know that music with a fast beat makes your heart beat faster and speeds up your breathing? And music with a slow beat makes your heart and breathing slow down? It's true.

The beat is music's pulse, and like yours, it doesn't stop until the performance is over.

The Notes

There are only three different note lengths you have to know at first.
You'll notice that the half notes and quarter notes have two examples.
Keep reading to find out why. From longest to shortest the notes are:

whole note, 4 beats each:

All notes are named from their relationship to the ***whole note***.

half notes, 2 beats each:

A ***half note*** is half as long as a whole note. (two half notes = 1 whole)

quarter notes, 1 beat each:

A ***quarter note*** is one fourth as long as a whole note (4 quarters = 1 whole).

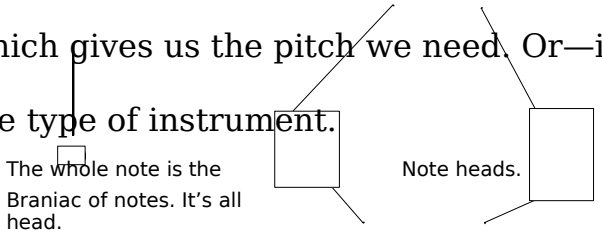
Note Anatomy 101

Let’s dissect a note. You’ll need to know the parts so that later in the
book, when I say, “Make sure the note head is in the space and flip the
stem,” you’ll know exactly what I’m talking about.

No notes were harmed for this dissection.

The Note Head

Not a tough one. Just like with people, the head is the round part
where almost everything is happening. It’s the position of the note
head which gives us the pitch we need. Or—in the case of the rhythm
clef—the type of instrument.



Note heads.

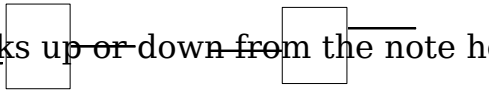
Notice how the shapes of the note heads are similar? Good. Some
might have holes in the middle, and some might be filled in, but
they’re all the same basic shape.

Size Doesn’t Matter

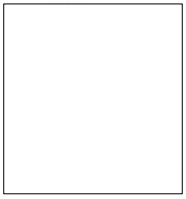
A whole note the size of my house and a whole note the size of a
house fly would each get the same number of beats.

The Stem

Whole notes don't have stems. Half notes and quarter notes do have
stems. So do eighth notes, but we'll get to them later. The stem is the
part that sticks up or down from the note head.

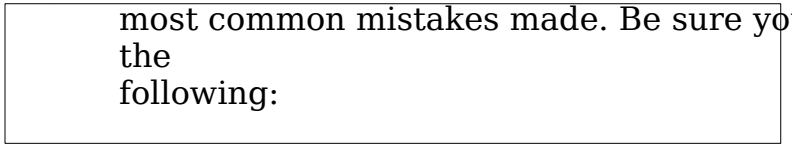


Put Your Stems Up, Put Your Stems Down

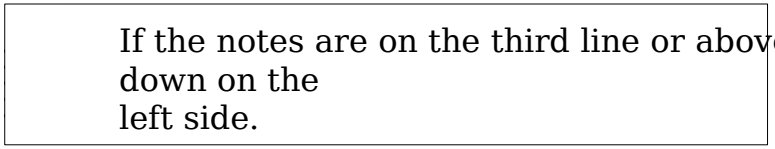


The stem can go either up or down. When a note is on the third line
of the staff or below, the stems grow up from the right side of the
note head.

Putting the stem on the wrong side of the note head is one of the
most common mistakes made. Be sure your notes look like the
following:



Example 11.1 Half notes and quarter notes, 3rd line and below, with their stems up.



If the notes are on the third line or above, the stems go down on the
left side.

Example 11.2 Half notes and quarter notes, 3rd line and above, with their stems down.

11: Where’s the Beat?

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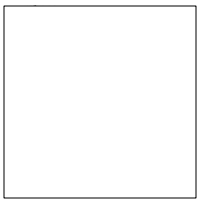
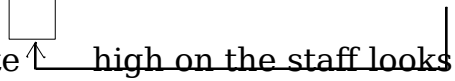
Third Line Notes Are Conformists

The stem will be up for a note on the third line if it's with other notes whose stems are up.

The stem will be down for a third line note if it's with other notes whose stems are down.



Here's an easy way to remember what the stems look like:



A note high on the staff looks like this.

A note low on the staff looks like this.

Moving On

This was a very important Chapter because if you don't recognize and know the lengths of notes, reading music will be impossible. Stay with this Chapter until you've understood it, and read it over again if you think it'll help.

So you've got pitch, you've got note lengths. Now you're ready for time signatures, or meters. Study the review until you know all the questions, then read on!

Chapter 11 Review

1. What is the beat, in music?

1. A steady pulse; what makes your toe tap

2. Name the notes you learned from shortest to longest.

2. quarter, half, whole

3. Which notes have stems?

3. Quarter and half notes

4. The stems of notes above the third line go _____.

4. Down

5. The stems of notes below the third line go _____.

5. Up

6. Notes on the third line have stems which go _____.

6. Either up or down

7. When will a note on the 3rd line have its stem up?

7. When it is with other notes with their stems up

8. How many beats does a whole note get?

8. 4

9. How many beats does a half note get?

9. 2

10. How many beats does a quarter note get?

10. 1

Practical Use

1. Draw a treble clef at the beginning of a blank staff. Fill up the line with different types of notes on different spaces and lines. Get in all three types: whole, half and quarter.

2. Go back through the notes in number 1 and write in the correct letter name underneath each note.

CHAPTER

12

THE SOUND OF SILENCE

The rest is silence.

— Shakespeare, Hamlet, Act v, sc.2

In This Chapter

- Rests in General
- Whole rest
- Half rest
- Quarter rest

Take a Rest

Ovid said that silence is strength. If that's true, you'll be much stronger
after this chapter because it's all about silence.

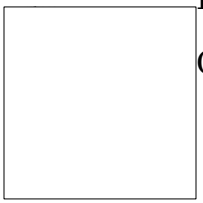
Silence in music is as important as sound, and of course we crafty
humans have invented a way to show this silence in music. Rests.

Rest lengths and rest names are the same as the note lengths you learned
in the last chapter. The three you'll learn in this chapter are whole rests,
half rests, and quarter rests.

The Rests of the Story

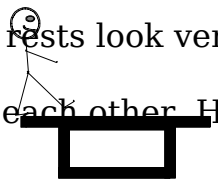
Whole rests are 4 beats long, and look like this:

Half rests are 2 beats long, and look like this:



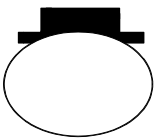
Quarter rests are one beat long and look like this:

Whole or Half, Hole or Hat



Whole rests and half rests look very much the same, and they can be
easily confused with each other. Here's a way to remember which is
which.

The whole rest, looks like a hole in the ground, like so:



The half rest, looks like a hat (I know, half and hat don't sound the
same, but work with me here):

12: The Sound of Silence

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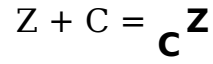
Making a Quarter Rest

This is probably one of the trickiest symbols to make in written music,
but it certainly isn't tough. Make a letter 'Z', then put a letter 'C' right
below it. It won't look exactly like the quarter rest above, but anyone
who reads music will know what it is (as long as you aren't too sloppy
with it).

Z + C = 

Rests On The Staff

Whole rests hang from the 4th line of the staff, half rests sit on the third
line, and quarter rests are plastered over the middle 3 lines. Notice the
brim of the "hat" and the edges of the "hole" are gone when the half and
whole rests are written on their proper line.

Example 12.1 Whole rest, half rest, and quarter rest on the staff.

Moving On

Without silence there can be no sound; without sound there can be no
silence. And silence is an important part of music, and now you know
how to show silence in music using whole, half and quarter rests. Make
sure you can answer all of the study guide questions before you move on.

Coming up next is meter or time signature, a device at the beginning of a

piece of music which tells you which note gets one beat and how many
beats are in each measure.

Chapter 12 Review

1. What does a rest show?

1. Silence

2. Which three rests did you learn?

2. Whole rest, half rest, quarter rest

3. How many beats does a quarter rest get?

3. 1

4. How many beats does a half rest get?

4. 2

5. How many beats does a whole rest get?

5. 4

6. Which line does the whole rest hang from?

6. 4th

7. Which line does the half rest sit on?

7. 3rd

8. On a scratch piece of staff paper, draw 5 whole rests, 5 half rests, and 5 quarter rests.

Practical Use

1. Fill up a line of staff paper alternating whole and half rests. Put an h below the half rests and a w under the whole rests.

2. Draw a bass clef at the beginning of a blank staff. Write in as many notes and rests as you can comfortably fit. Include all notes and rests you've learned. Though the rests must go in specific places, use many different notes from high to low.

3. Go back through these notes and rests and name them. Letter names for the notes (A-G) and h,w,q for rests.

CHAPTER

13

METER

All times are not alike.

— Cervantes, Don Quixote

In This Chapter

- Meter/Time Signature
- 4/4 Time
- 2/4 Time
- 3/4 Time

Not the Metric System

At the beginning of every piece of music is what is called the time signature or meter which gives you information about the piece of music you're about to play.

The time signature or meter tells you how many beats are in each measure. To review measures, see "Measure" on page 28. The time signature also tells you what kind of note gets one beat. To review the notes, see "The Notes" on page 92.

Example 13.1 The most common time signatures, or meters: 4/4, 3/4, and 2/4.

The Top Number

The top number tells you how many beats will be in each measure. So, in the examples above, in 4/4 time, there will be 4 beats in each measure; in 3/4 time there will be three beats in each measure, and in 2/4 time there will be two beats in each measure.

The top number in the meter can be almost anything, but the most common ones are 4, 3, 2, and 6, in that order.

The Bottom Number

The bottom number tells you which note gets one beat. Remember fractions? Another way of saying 1/4 is one quarter, right? And so, with a 4 in the bottom of the time signature, you know that the quarter note receives one beat.

There are several possible numbers for the bottom of the time
signature. The most common are 4, 2, and 8, with 4 being by far the
most common. And because it’s the most common (and the easiest to
understand), we’ll stick with 4 as the bottom number until Chapter 33
More Meters, in which you’ll learn about time signatures in which a
note other than the quarter receives the beat.

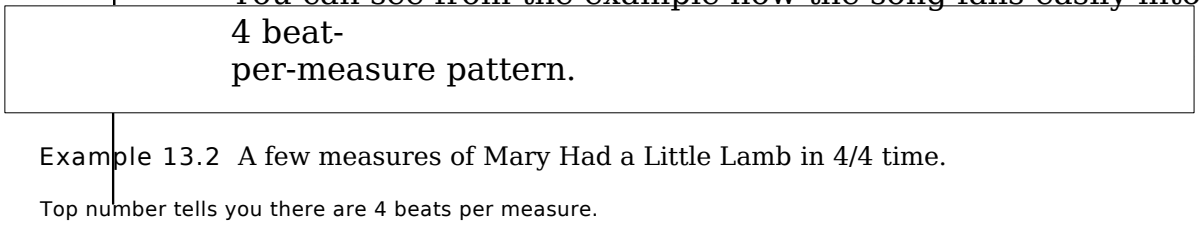
Why One Meter and Not Another?

Why have different meters? When you look at the following examples
you'll see how the words and the music fall in certain patterns. The
pattern might be shaped by the words, or the music. If there is a 4-beat
pattern, it'll be in 4/4 time. A 2-beat pattern is in 2/4 time, and a 3-beat
pattern is in 3/4 time.

4/4 Time

This meter is more common than all of the other meters by a long way. If
you're a beginner, you'll most likely be working with this time signature
for quite a while before moving on to others.

You can see from the example how the song falls easily into the 4 beat-
per-measure pattern.



Example 13.2 A few measures of Mary Had a Little Lamb in 4/4 time.

Top number tells you there are 4 beats per measure.

Mar - y had a lit - tle la-mb lit - tle la-mb lit - tle la-mb...

Bottom number tells you the quarter note gets one beat.

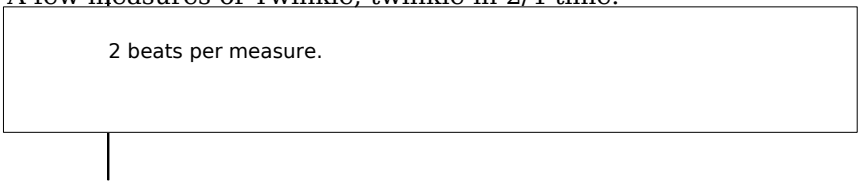
Common Time

Because 4/4 time is so common, you'll often see a letter "C" in the place
of the time signature. The "C" stands for "common," and looks like this:

2/4 Time

Another fairly common time signature, though not as common as 4/4.
Again, notice how easily this example falls into the pattern of 2 beats per
measure.

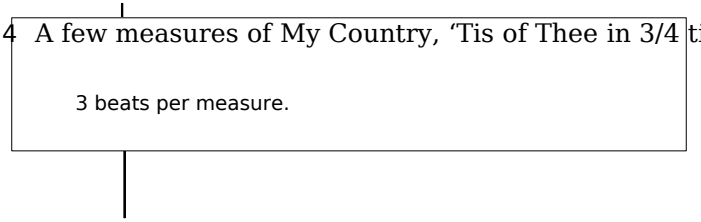
Example 13.3 A few measures of Twinkle, twinkle in 2/4 time.



3/4 Time

If you've ever heard a waltz, or danced a waltz, you've heard the 3/4
pattern. It has a strong pulse on the first beat of each measure.

Example 13.4 A few measures of My Country, 'Tis of Thee in 3/4 time.



Moving On

Now that you've learned meters, and what the numbers mean, it's now
time to learn a system for counting notes and rests so that you can figure
out how rhythms in a piece of music sound.

But first, the chapter review.

Chapter 13 Review

1. What is another name for meter?

1. Time signature

2. Where does the time signature appear?

2. At the beginning of a piece of music, directly after the clef

3. What information does the time signature give?

3. How many beats in each measure, and what type of note gets one beat

4. Which are the three most common time signatures?

4. 4/4, 2/4, 3/4

5. What does the top number tell us?

5. How many beats in one measure

6. What does the bottom number tell us?

6. What type of note gets one beat

7. Why are different meters used?

7. Each song has a pattern. The meter depends on the pattern of each song.

Practical Use

1. Write any meter you have learned at the beginning of a staff. Choose a clef also, and place the two correctly. Are you using a pencil? Do. It saves time and is much neater when mistakes are made.

2. Fill up a line with notes and rests. Feel free (and do) change clef and meter when you want. Simply write the meter/clef where you want it to change.

13: Meter

CHAPTER 14

DOWN WITH THE COUNT

Music is nothing else but wild sounds civilized into time and tune.

— Thomas Fuller, History of the Worthies of England.

In This Chapter

- Tap Your Foot
- Counting Quarter Notes
- Counting Half Notes
- Counting Whole Notes
- Counting Rests

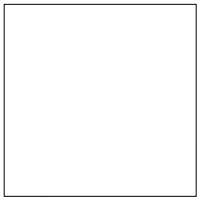
Can You Count to 4?

Now that you know the note lengths and time signatures, we can move on to the counting system.

The counting system is very helpful, especially for difficult rhythms. Every time I have a student count a difficult passage out loud, it becomes much easier. When you count, do it rhythmically, and tap your foot with a steady beat at the same time.

The rhythms we'll be using at first won't be tough, so you can get a good idea of how the system works. Gradually I'll introduce more and more difficult rhythms on which to practice this counting system.

The good news is that you only have to know how to count to 4, the length of a measure of 4/4 time. And because we don't really need a specific pitch for this exercise, we'll use the one-line rhythm clef for the examples.



Tap Your Foot

It's one thing that both beginning musicians and masters have in common. It's what keeps your rhythms the right length, and it keeps you synchronized with others you may be playing with. It's the foot tap.

Over the last few days I watched Eric Clapton, then B.B. King, then Wynton Marsalis, then Leo Kottke, then Metallica, and all of them, almost the entire time they played, were tapping their feet. And if they

didn’t tap their foot (which was seldom), their bodies moved in some
other way to keep time steady.

If you’re in a large group in which 20 or more people tapping their feet
sounds like a marching army, tap your toe inside your shoe, or tap your
heel softly instead. If you’re playing solo guitar, maybe a blues tune, you
can stomp your foot on beats 2 and 4 to add a little percussion to your
song. Either way, if you tap your foot your performance will be better for
it.

If you’re not used to tapping, it’ll take a little concentration and a little
coordination but keep with it even if it’s difficult at first. Soon you’ll be
tapping your foot without thinking about it.

If you don’t tap, or keep some rhythmic movement going, you’re pretty much guessing where the beat is. What you’re after is precision.

On to the counting system.

Quarter Note Count

The count is basically the same as the beat, so in 4/4 time, or any time signature with a 4 as the bottom number, the beat is the same as the quarter note. Here’s what a measure of quarter notes looks like with the proper counting:

Example 14.1 Two measures of quarter notes with counting.

1 2 3 4 1 2 3 4

Simple and straightforward. At the beginning of the measure, the count begins again at “1”.

Don’t forget to tap your foot. As you say the numbers out loud, say them rhythmically, so you can feel the beat. If you’re doing it correctly, each number is said as the foot hits the floor.

This will come in handy later. Trust me.

Half Note Count

Half notes, because they’re two beats, are treated a little differently. It’s easier to show than to explain. Remember the sound of a half note in 4/4 time is sustained for two beats each. Here you go:

Example 14.2 Two measures of half notes with counting.

You probably guessed the count would look something like that, right?
The dash shows that the sound is continuous. When you say this rhythm,
say it rhythmically, and say the 1 and 3 louder than the 2 and 4. Each half
note will have two foot taps.

For these two measures, you would say (rhythmically), “ONE-two,
THREE-four, ONE-two, THREE-four.”

Whole Note Count

I’m sure you could figure out the whole note counts for yourself, but I’ll
give them to you anyway.

Example 14.3 2 measures of whole notes with counting.

1-2-3-4 1-2-3-4

For these two measures, you’d say, “ONE-two-three-four, ONE-two-
three-four.”

Mix ‘Em Up

Any combination of notes will be counted similarly. I won’t include
whole notes in the example because, in 4/4 time whole notes get the
entire measure to themselves.

Example 14.4 Counting for mixed quarter and half notes.

1 2-3 4 1 2 3-4 1-2 3 4

14: Down With the Count

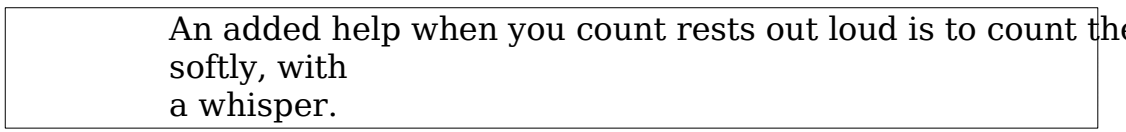
Other Meters

Other meters, like 2/4 and 3/4 would be treated the same, the only
difference being there would be less counts in each measure. An added
bonus is that in those meters, whole notes aren't used.

Count the Rest

Counting rests is very similar to counting notes. Because rests are silent,
parentheses ( ) are used to indicate the silence. Here are three measures
with whole, half, and quarter rests. And just for kicks, we'll use the 5-line
treble clef staff.

> An added help when you count rests out loud is to count them softly, with
> a whisper.



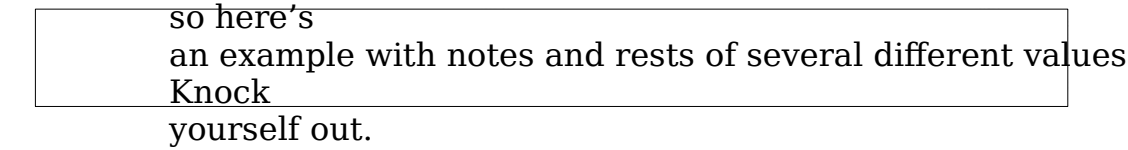
Example 14.5 Whole, half, and quarter rests with counting.

(1-2-3-4) (1-2) (3-4) (1) (2) (3) (4)

All Together Now

I'd rather be guilty of overkill than guilty of not being thorough, so here's
an example with notes and rests of several different values. Knock
yourself out.

Count out loud and rhythmically, and don't forget to tap your foot.



Example 14.6 Notes, rests, and their counts in 4/4 time.

1-2 (3) 4 1 2 (3-4) (1) 2-3 4

Moving On

Being able to read rhythms is one of the most valuable skills you can
have as a musician, and this counting system (combined with a foot tap)
will help you figure out how a rhythm sounds.

Coming up next you'll learn what a tiny little dot (.) can do to the length
of a note.

Chapter 14 Review

1. The count of any measure, in any time signature/ meter, begins with what number?

1. 1

2. How is a measure of quarter notes in 3/4 time counted?

*2. **1 2 3***

3. How is a measure of half notes in 4/4 time counted?

*3. **1-**2, **3-**4*

4. How is a whole note counted in 4/4 time?

*4. **1**-2-3-4*

5. When writing out the counting, what is used to indicate a rest?

5. parentheses ( )

6. When counting out loud, how should you count a rest?

6. softly

Practical Use

1. Write out 8 measures of each meter: 2/3, 3/4, and 4/4. Use notes and rests randomly.
Get as many in as you can. Go back through and do the counting. Say it out loud
(remember the rests are whispered) while you tap your foot.

14: Down With the Count

CHAPTER

15

NEW NOTES

Indeed, what is there that does not appear marvellous when it comes to our knowledge for the first time?

— Pliny the Elder

In This Chapter

- Eighth Notes, Eighth Rests
- Counting Eighth Notes and Rests
- Sixteenth Notes, Sixteenth Rests
- Counting Sixteenth Notes and Rests

Eighth Notes and Rests

Remember when I said all notes get their name because of their relationship to the whole note? If you don't remember, check out "The Notes" on page 92 for a refresher.

Eighth notes are no different. You can tell by their name that they're 1/8 as long as a whole note (which I'm sure you remember gets 4 beats).
What is one eighth of 4 beats? It's one half of a beat.

An eighth note gets half of a beat in 4/4 time.

It might be easier to say that there are 8 eighth notes in one whole note.

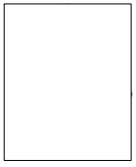
Or that there are 4 eighth notes in one half note.

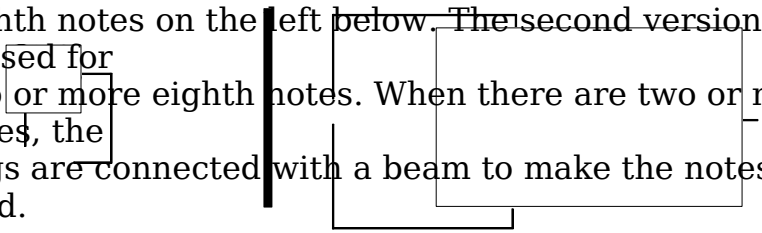
Or that there are 2 eighth notes in one quarter note.

Or that there are 2 eighth notes per beat.

"Okay, Okay, I get it," you say. "Just show me the notes!" Well, before I do, there's something you should know about. They're called flags, and we're not talking about the stars and stripes.

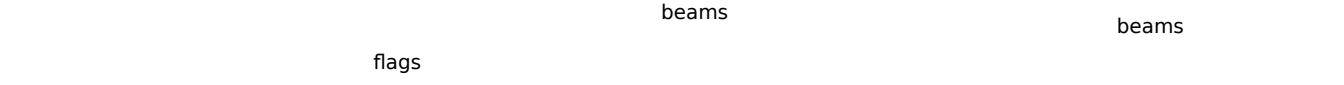
A flag is a doohickey which hangs from the end of the stem of an eighth note, and it has two forms. The first type can be seen dangling from the eighth notes on the left below. The second version on the right is used for two or more eighth notes. When there are two or more eighth notes, the flags are connected with a beam to make the notes easier to read.





When you add a flag or beam to a note, it cuts the note's value in half.

Example 15.1 LEFT: Single eighth notes. RIGHT: Eighth notes grouped by twos and fours with beams (flags connected).



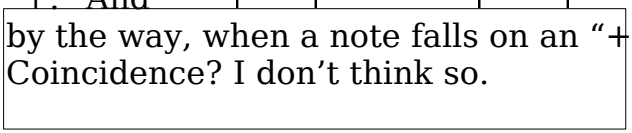
15: New Notes

Counting Eighths

Because there are two eighth notes for every beat, the count is a little
different than what you've learned already. With eighth notes, the beat
is subdivided, which means chopped up (but evenly chopped up).

Here are two measures of eighth notes in 2/4 time. And just so you
know, when said out loud, the "+" sign is pronounced "and."

Be sure when you count these, that your foot comes down firmly on
each number. Your foot will be in the "up" position for the "+." And
by the way, when a note falls on an "+," it's called an upbeat.
Coincidence? I don't think so.

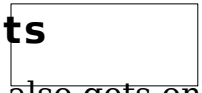


Example 15.2 8th note count in 2/4 time.

In 4/4 time the count would be "One And Two And Three And Four
And (said rhythmically with your foot tapping away like a machine).

Eighth Rests

The eighth rest also gets only 1/2 of a beat, but is silent. The eighth rest
looks like a seven with a strange growth at its tip and it lies in the middle
of the staff, like so:



Example 15.3 One little bitty eighth rest, all by its lonesome.

Counting Eighth Rests

The count for eighth rests is the same as the count for eighth notes,
only there is a parentheses ( ) around either the number or the +. When
counting the eighth rest, be sure you know which part of the beat the

rest falls on, the upbeat (when your foot is up), or the downbeat (when your foot hits the floor).

Here are a few measures of eighth notes and eighth rests with the counting. Be sure to count it rhythmically, and say the rests more quietly than the notes.

Example 15.4 A whole mess of eighth rests and eighth notes, with counting.

(1) + 2 + 3 + (4) + 1 + 2 (+) 3 (+) 4 (+)

Sweet Sixteenth Notes

Why sweet? Because sixteenth notes are the last type of note you'll learn in this book. Yippee!

You've probably already figured out that, because of the name, there are 16 of these babies in each whole note. Okay, time for a little math. If you divide up 4 beats (the whole note) sixteen ways, how long is each sixteenth note?

The answer is...1/4 of a beat.

So there are 16 sixteenth notes in one whole note,

or 8 sixteenth notes in one half note,

or 4 sixteenth notes in one quarter note,

or 4 sixteenth notes in one beat of 4/4 time,

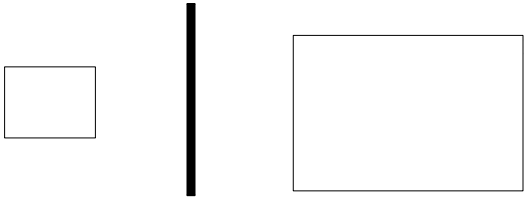
or 2 sixteenth notes in one eighth note.

So what do they look like? Coming up. Sixteenth notes also have flags,

with one added bonus: there are two of them.

When a flag is added to a note, it cuts the note length in half.

Example 15.5 LEFT: Single sixteenth notes. RIGHT: Sixteenth notes in groups of 4 and 2.



Counting Sixteenths

I love counting sixteenth notes. Just like with eighth notes, the beat is subdivided, but even more so than with eighths. Each beat is split up into 4 parts, and each part has a name.

Again, when you're counting, make sure your foot is tapping down on each number (each beat), and up with each "+" symbol, just like with eighth notes. The "e" occurs halfway up and the "a" occurs halfway down.

Practice this count with your foot VERY SLOWLY until you've got it down enough to do it more quickly.

Example 15.6 A measure of sixteenth notes with counting.

1 e + a 2 e + a 3 e + a 4 e + a

Sixteenth Rests

They look like eighth rests but with an extra little flag on them:

Example 15.7 A single sixteenth rest, all by its lonesome.

Counting Sixteenth Rests

The same count is used (1 e + a) but as before, there are parentheses
around the rests.

Here are some measures with the sixteenth rest in different positions in
the measure.

Example 15.8 Sixteenth rests scattered around the measures.

1 e (+) a 2 e +(a) 3 (e) + a (4) e + a (1) e (+) (2) (3-4)

How to Figure out a Tough Rhythm

1 Write out the counting under the notes. Triple check to make sure
you've written it out correctly.

2 Practice saying it rhythmically VERY SLOWLY, and be sure to tap
your foot down on each number, and up on each "+."

3 If there are rests, say them more quietly than the notes.

4 Repeat from step two, and as your brain becomes used to the rhythm,
gradually increase speed. If it's frustrating or you're making mistakes,
slow it down and try it again.

5 If all else fails, find someone who reads music better than you and ask
them for help.

Moving On

I'm sure you're discovering that the notes and counting system don't
stick in your brain with just one reading. Not to worry, this is normal. It

takes a while living with these new concepts before they seem familiar
and easy. You may have to refer back to these chapters often, and that’s
okay too. Stick with it.

You’ve now been introduced to all the types of notes and rests that you’ll
probably ever need for reading music. However, these notes you’ve
learned can be treated in such a way as to change their length.

One of these is a small dot following a note. In the next chapter you'll
learn all about these dots and what they do to the length of a note.

Chapter 15 Review

1. How long is an eighth note?

1. 1/2 beat

2. How long is an eighth rest?

2. 1/2 beat

3. How many eighth notes in one quarter note or one beat of 4/4 time?

3. 2

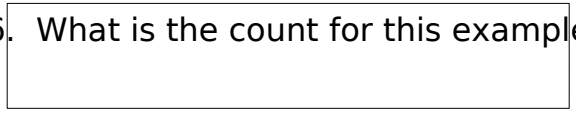
4. How are eighth notes counted in 4/4 time?

4. 1 + 2 + 3 + 4 +

5. How are eighth rests counted in 2/4 time?

5. (1) (+) (2) (+)

6. What is the count for this example?



6. 1 + 2 (+)
3 (+) 4 (+)

7. How long are sixteenth notes in 4/4 time?

7. 1/4 beat

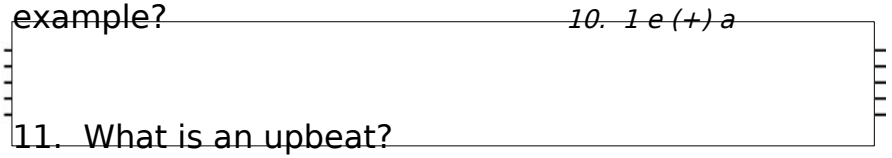
8. How many sixteenth notes are in one quarter note or one beat of 4/4 time?

8. 4

9. How do you count sixteenth notes in 4/4 time?

9. 1 e + a 2 e + a
3 e + a 4 e + a

10. What is the count for this example?10. What is the count for this example?



10. 1 e (+) a
2 e + (a)
3 (e) + a
(4) e + a

11. What is an upbeat?

11. What is an upbeat?

11. The part of the beat when your foot is in the "up" position; the "+" of a beat.

Practical Use

1. On a blank staff, write out eight single eighth notes, four stem up and four stem down. Write out another eight barred in groups of 2 with stems up and down, then nine barred in groups of 3, and a final eight grouped in fours.

2. Go back through and name each note in exercise number one. Do at least 4 in each group. Write in the counting under the notes you've written. Use a 4/4 time signature and place the bar lines correctly.

3. On a blank staff write out sixteen single sixteenth notes, 8 stem up and 8 stem down. Another 8 barred in groups of 2, then 9 sixteenths barred in groups of three, and finally 8 barred in groups of 4.

4. Write the count under the sixteenth notes you've written. Use a 3/4 time signature and place the bar lines correctly.

CHAPTER

16

SEEING DOTS

We see things not as they are, but as we are.

— H.M. Tomlinson,
Out of Soundings

In This Chapter

- The Effect of a Dot
- Dotted Whole Note
- Dotted Half Note
- Dotted Quarter Note
- Dotted Eighth Note

You Are Not Seeing Things

Those dots you see behind some notes are supposed to be there. A dot just to the right of a note makes the note longer. How much longer? Well it depends on what note the dot follows. Let me explain.

A dot adds half the amount of the note it follows. Another, perhaps simpler, way of saying it, is that a dotted note is 1.5 times the length of the same kind of note without a dot.

Sounds weird doesn't it? An example might throw more light on this peculiar practice. Let's use a whole note as our first example.

The Dotted Whole Note

A whole note ( ), as you know, gets 4 beats. Half of that is two, for a total of six.

Or, 4 x 1 1/2 = 6; or 4 + 2 = 6

A dotted whole note ( ) has six beats.

But wait a minute, you might be saying, there are only 4 beats in a measure. Well, for 4/4 time, you're right. But with dotted whole notes we need a new meter, 6/4 time. Remember the top number tells us there are six beats per measure; the bottom number tells us that the quarter note gets one beat. Here are a couple measures of 6/4 time:

Example 16.1 Three measures of dotted whole notes.

1-2-3-4-5-6 1-2-3-4-5-6 1-2-3-4-5-6

16: Seeing Dots

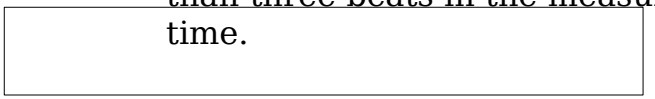
The Dotted Half Note

A more common type of dotted note is the dotted half note. How long is a dotted half note? Use the formula. The half note gets two beats, and half of that is one. Two plus one is three.

Or, 2 x 1 1/2 = 3.

The dotted half note gets three beats.

Though a dotted half note could happen in any time signature with more than three beats in the measure, in the example, I've used 3/4 time.



Example 16.2 Three measures of dotted half notes.

1-2-3 1-2-3 1-2-3

The Dotted Quarter Note

Here's where things get a little tricky, but it's still not too tough. A quarter note gets one beat. Half of that is half of a beat.

Or 1 1/2 x 1 = 1 1/2

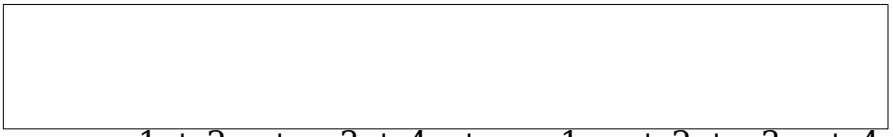
A dotted quarter note gets 1 1/2 beats in 4/4 time.

To make the counting easier, think of the dotted quarter note in terms of how many eighth notes are in it. Because it's 1 1/2 beats, that comes out to be 3 eighth notes.

Notice that when counting dotted quarters, you use a count similar to eighth notes. This is so that you can keep track of exactly how long each

dotted quarter note is. Say the bold items in a normal voice, and the rest
in a softer voice, as always with a steady foot-tap.

Example 16.3 Two measures of dotted quarter notes in 4/4 time.

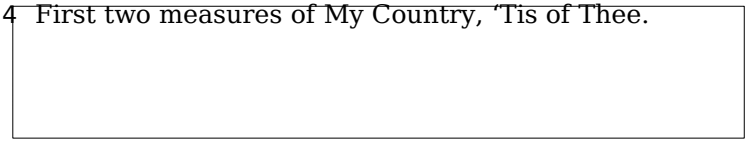


1-+-2 + 3-+-4 + 1 +-2-+ 3 +-4-+

Musical Example

Because this rhythm is a little trickier, below is an example which you
should recognize (be sure to tap your foot):

Example 16.4 First two measures of My Country, 'Tis of Thee.



1 2 3 1-+-2 + 3
My coun- try 'tis of thee

Dotted Eighth Note

This is the last type of dotted note we'll discuss. Find the length with the
same process as the other dotted notes.

An eighth note is half of a beat. There are two sixteenth notes in one
eighth note. So half of an eighth note is 1/4 of a beat, or 1 sixteenth note.
When we add that to the eighth note, we get 3/4 of a beat, or 3 sixteenths.

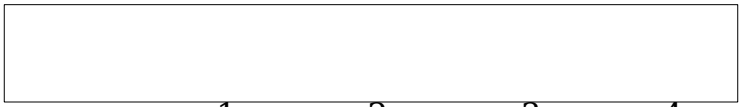
Or, 1 1/2 x 1/2 = 3/4.

You'll rarely see a dotted eighth note without a sixteenth note following
it to round out the beat. In fact, it's so common, that the figure has a
name. Dotted eighth-sixteenth. Go figure.

Here is a measure of dotted 8th-16ths. Notice that a sixteenth note count

is used so that you can keep track of exactly how long the dotted eighth
is. Be sure your foot hits the floor on the numbers.

Example 16.5 The dotted 8th-16th figure.



1-e-+ a 2-e-+ a 3-e-+ a 4

Musical Example

Here's a musical example you'll recognize which uses the dotted
8th-16th figure.

Example 16.6 First few notes of The Star Spangled Banner

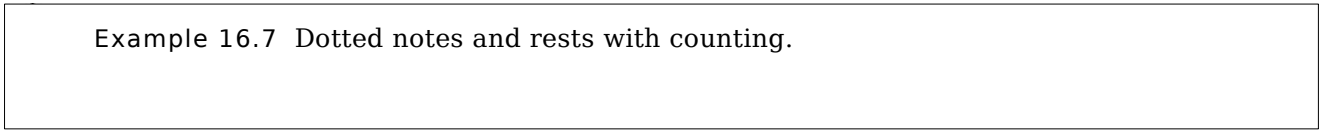
(1) (2) 3-e-+ a 1 2 3 1-2 3-e-+ a 1
O - h say can you see, by the dawn's

Dotted Rests

Dotted rests are treated exactly the same as dotted notes, the only
difference being that the count will be in parentheses.

This example has dots like a sickness, and that's for the sake of illustration. You won't normally see a musical passage with that many
dots.

Example 16.7 Dotted notes and rests with counting.



1-+-2 (+) (3-4-5) 6 (1-+-2) + 3-e-+ a 4 (e-+-a) 5 6 (1-2-3-4-5-6) 1-2-3-4-5-6

Moving On

The concepts you're learning are becoming more complex, and you'll probably find it will take some time living with these ideas before they really stick, so come back and review as much as you want.

Now that you understand that a dot increases the length of a note by half its original value, you can decipher the length of any dotted note.

Coming up next is another treatment of the notes you already know, called triplets, which is a grouping of three notes. Find out what it all means in the next chapter.

Chapter 16 Review

1. What does a dot do to a note?

   1. Makes the note it follows 1 1/2 *times as long*

2. How long is a dotted half note?

   2. Three beats

3. How long is a dotted quarter note?

   3. 1 1/2 *beats*

4. How long is a dotted eighth note?

   4. 3/4 *of a beat*

5. Which type of note usually follows a dotted eighth note?

   5. Sixteenth note

6. Why?

   6. To round out the beat

Practical Use

1. In any clef, using as few measures as possible in 6/4 time, include every dotted note
you've learned. Write in the counting and the letter names of the notes. Check your
work with a friend.

CHAPTER

17

TRIPLETS!

A composer is someone who goes around forcing their will on unsuspecting air molecules. Often with the assistance of unsuspecting musicians.

— Frank Zappa

In This Chapter

- General Tuplet Information
- Eighth Note Triplets
- Sixteenth Note Triplets
- Quarter Note Triplets

General Tuplet Information

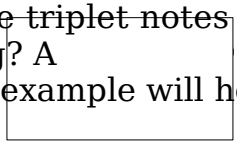
The notes you're about to learn are called triplets, and they belong to a group of notes known as tuplets.

A tuplet is a group of notes that doesn't follow the normal rules of counting. Some examples would be duplets (2 notes), triplets (three notes), quintuplets (5 notes), and sextuplets (6 notes). Of course there are also septuplets, octuplets and on and on, but you get the idea, right? In this chapter you'll learn triplets because they're the most common, and the easiest to understand.

The rule you'll want to remember for triplets, is that a triplet (three notes) takes place in the amount of time it would normally take to play two of the triplet notes at their regular length. Sound confusing? A concrete example will help explain.

Eighth Note Triplet

Eighth note triplets are the most common triplet and the easiest to count and to feel. The three notes of the triplet are beamed together, and there is a small three over the beam telling you the figure is a triplet. They look like this:



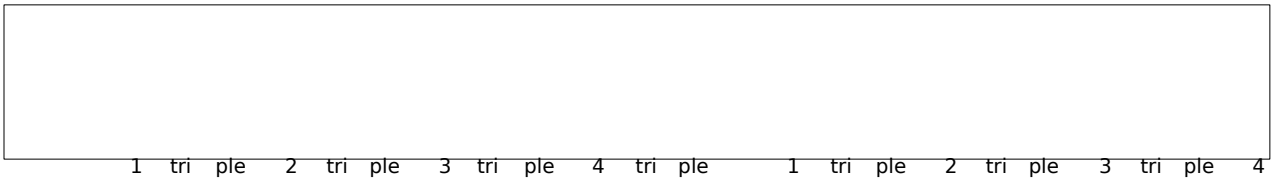
All triplets are played in the time of two notes of equal value. What this means for the eighth note triplet is that the eighth note triplet is played in

the amount of time it normally takes to play two eighth notes, which is
one beat.

An eighth note triplet is one beat long.

In the next example you can see how eighth note triplets are counted. Be
sure to tap your foot as you count so that your foot hits the floor on all the
numbers.

Example 17.1 A few measures of eighth note triplets with counting.



Sixteenth Note Triplets

To find the length of a sixteenth note triplet, we use the same rule: a triplet's length is the same length as two notes of equal value. That means a sixteenth note triplet happens in the time it takes to play two sixteenth notes, which is half of a beat.

A sixteenth note triplet is a half beat long.

Sixteenth note triplets look like this: .

The counting for sixteenth note triplets is a little trickier than most other rhythms, but with a couple tries and some foot coordination, you shouldn't have any trouble.

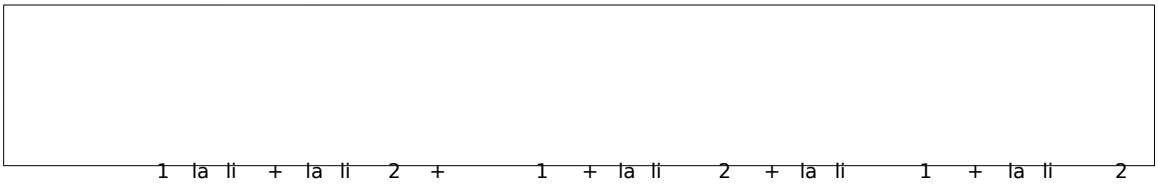
The count for two beats of sixteenth note triplets is 1 la li + la li, 2 la li + la li. The "1" and "2" occur when your foot hits the floor, the "+" is the upbeat, or the second half of the beat, when the foot is in the "up" position. The "la" and "li" should fit between the number and the "+", while your foot is either going up or coming down.

Sixteenth note triplets are fast, even at a slow tempo, so you have to spit out that "la-li" quickly. It'll probably take a few tries to get it right, so

keep at it until you’ve got it.

In the example which follows, notice that in measure two and three the
sixteenth note triplet is connected to an eighth note. Sixteenth note
triplets are often paired with eighth notes to round out the beat.

Example 17.2 Sixteenth note triplets and their count.



Quarter Note Triplets

Quarter note triplets are difficult to count accurately, so I've saved them
for last.

Using the triplet rule for quarter note triplets means that the quarter note
triplet takes place over the length of two quarter notes, or two beats.

Quarter note triplets are two beats long.

Quarter note triplets have a curvy line over them, with the three in the
middle. This curvy line simply groups the notes together so you can tell
which three notes are in the triplet. Here's what they look like.

The reason quarter note triplets are difficult to count is that you have to
divide two beats three ways, and we don't easily think in thirds. If we
divide 2 by three, we get 2/3, so each note of the quarter note triplet is
2/3 of a beat long.

This makes regulating the length of a quarter note triplet with the foot tap
difficult, but not impossible. Let's break it down.

The first note of the triplet is easy because it starts right on the beat, or
when the foot hits the floor.

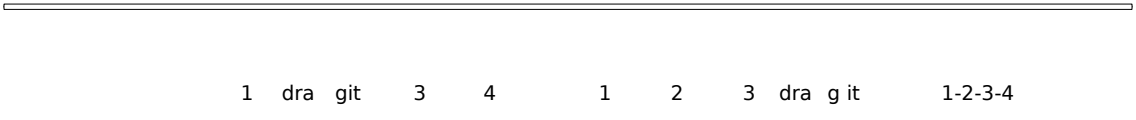
The second note of the triplet happens 2/3 of a beat after the first, so your
foot will have gone up and will just be coming down when the second
note starts.

The third note of the triplet happens 4/3 of a beat after the first (or
11/3 beats), so the third note starts just after the foot taps down on the
second beat of the triplet.

This is a confusing concept, and I would highly suggest you get someone
familiar with quarter note triplets to show you some. It will be worth your
time.

When you hear quarter note triplets, they feel as though they are
dragging, and that’s why you see “drag it” in the count. The word drag is
split up so that the g goes with the it.

Example 17.3 Quarter note triplets with the count.



Moving On

In a week or two you may find your memory of triplets fuzzy. This is
pretty normal. Just like with learning a language, learning to read music
takes time and a lot of exposure. If the information about triplets is tough
to remember, keep coming back to it until you’ve got it.

Well, it was a long section, the longest in the book, but now it’s over!
After the review for this chapter is the big review for the entire section.

Coming up in the next section, you’ll learn about flats, sharps and

naturals, the piano keyboard, the Major scale, and key signatures.

Chapter 17 Review

1. How long is an eighth note triplet in 4/4 time?

1. One beat

2. How is a measure of eighth note triplets counted in 4/4 time?

2. 1 tri ple 2 tri ple 3 tri ple 4 tri ple.

3. How long is a sixteenth note triplet? *3. 1/2 beat*

4. What is the count for a measure of sixteenth note triplets in 2/4 time? *4. 1 la li + la li 2 la li + la li*

5. Where is your foot positioned on “+” part of the beat? *5. Up*

6. How long is a quarter note triplet? *6. Two beats*

7. How long is each note in the quarter note triplet? *7. 2/3 beat*

8. On which part of the foot tap does the 2nd note of the quarter note triplet fall? *8. Just after the “+” of the first tap.*

9. On which part of the foot tap does the 3rd note of the quarter note triplet fall? *9. Just after the second tap.*

10. Ask a teacher or musician to demonstrate quarter note triplets to you.

Practical Use

1. In any clef write out three measures of 4/4 time using all the triplet figures you’ve learned. Write in the count underneath them.

2. Play or sing what you’ve written. If it is too difficult, simplify it as much as possible until you can sing or play it.

3. Have someone demonstrate quarter note triplets for you. Imitate what you hear.

Part III Review

Whew! You Made It

These pages can be used to test your memory on what you've learned in
Part III, and if some of the information hasn't stuck, you can go back and
check it out on the page indicated below the question.

As with the chapter reviews, use your keyboard to cover up the answers
while you test yourself.

When you think you've got it all down, either take the test in Basic Music
Theory: Teacher's Edition, or go on.

The Review

1. What is the beat, in music?
   page 92

1. A steady pulse; what makes your toe tap

2. Name the notes you learned from shortest to longest.
   page 92

2. Quarter note, half note, whole note

3. Which notes have stems?
page 93

3. Quarter half, eighth and sixteenth notes

4. The stem of notes above the third line go _____.
page 94

4. Down

5. The stems of notes below the third line go _____.
page 94

5. Up

6. Notes on the third line have stems which go _____.
page 94

6. Either up or down

7. How many beats does a whole note get in 4/4 time?
page 92

7. 4

8. How many beats does a half note get in 4/4 time?
page 92

8. 2

9. How many beats does a quarter note get in 2/4 time?
page 92

9. 1

10. What does a rest show?
page 98

10. Silence

11. Which five rests did you learn?
page 98, page 115, page 117

11. Whole rest, half rest, quarter rest,eighth rest, sixteenth rest

12. How many beats does a quarter rest get in 2/4 time?
page 98

12. 1

13. How many beats does a half rest get in 3/4 time?
page 98

13. 2

14. How many beats does a whole rest get in 4/4 time?
page 98

14. 4

15. Which line does the whole rest hang from?
page 98

15. 4th

16. Which line does the half rest sit on?
page 98

16. 3rd

17. On a scratch piece of staff paper, draw 2 whole rests, 2 half rests, and 2 quarter rests.

18. What is another name for meter?
page 102

18. Time signature

19. Where does the time signature appear?
page 102

19. At the beginning of a piece of music, directly after the clef

20. What information does the time signature give?
page 102

20. How many beats in each measure, and what type of note gets one beat

21. What are the three most common time signatures?
page 103

21. 4/4, 2/4, 3/4

22. What does the top number tell you?
page 102

22. How many beats in one measure

23. What does the bottom number tell you?
page 102

23. What type of note gets one beat

24. Why are different meters used?
page 103

24. The meter depends on the rhythmic pattern of the song.

25. The count of any measure, in any time signature/ meter, begins with what number?
page 108

25. 1

26. How is a measure of quarter notes in 3/4 time counted?
page 109

26. ***1, 2, 3***

27. How is a measure of half notes in 4/4 time counted?
page 109

27. ***1-****2,* ***3-****4*

28. How is a whole note counted in 4/4 time?
page 110

28. ***1****-2-3-4*

29. When writing out the counting, what is used to indicate a rest?
page 111

29. Parentheses ( )

30. When counting out loud, how should you count a rest?
page 111

30. Softly

31. When counting out loud in 4/4 time, how would you say a measure of half notes?
page 109

31. ONE-two, THREE-four

32. How long is an eighth note in common time (4/4)?
page 114

32. 1/2 beat.

33. How long is an eighth rest in 2/4 time?
page 115

33. 1/2 beat.

34. How many eighth notes in one quarter note or one beat of 3/4 time?
page 114

34. 2.

35. How are eighth notes counted in 4/4 time?
page 114

35. 1 + 2 + 3 + 4 +

36. How is a measure of eighth rests counted in 2/4 time?
page 115

36. (1) (+) (2) (+)

37. How long is one sixteenth note in 4/4 time?
page 117

37. 1/4 beat.

38. How many sixteenth notes are in one quarter note or one beat of 4/4 time?
page 117

38. 4

39. How do you count sixteenth notes in 4/4 time?
page 117

39. 1 e + a 2 e + a 3 e + a 4 e + a

40. What does a dot do to a note?
page 122

40. Makes it longer by half its original value

41. How long is a dotted whole note?
page 122

41. Six beats

42. How long is a dotted half note?
page 123

42. Three beats

43. How long is a dotted quarter note?
page 123

43. 1 1/2 beats

44. How long is a dotted eighth note?
page 124

44. 3/4 of a beat

45. Which type of note usually follows a dotted eighth note?
page 124

45. Sixteenth note

46. How long is an eighth note triplet in 4/4 time?
page 128

46. One beat

47. How is a measure of eighth note triplets counted in 4/4 time?
page 128

47. 1 tri ple 2 tri ple 3 tri ple 4 tri ple

48. How long is a sixteenth note triplet?
page 129

48. 1/2 beat

49. What is the count for a measure of sixteenth note triplets in 2/4 time?
page 129

49. 1 la li
+ la li
2 la li
+ la li

50. Where is your foot positioned on “+” part of the beat?
page 129

50. Up

51. How long is a quarter note triplet?
page 130

51. Two beats

52. How long is each note in the quarter note triplet?
page 130

52. 2/3 beat

53. On which part of the foot tap does the 2nd note of the quarter note triplet fall?
page 130

53. Just after the “+” of the first tap

54. On which part of the foot tap does the 3rd note of the quarter note triplet fall?
page 130

54. Just after the second tap

CHAPTER 18

Interlude

DON'T SAY ***PRACTICE***

I never practice; I always play.

— Wanda Landowska, 1952

In This Interlude

- Don't Say the P Word
- A Note on Private Teachers
- How Much to Play
- When, Where, How

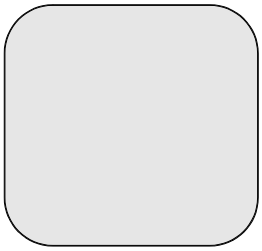
- The Ideal Practice Session

Don’t Say the P Word

Johann Sebastian Bach said, “There’s nothing remarkable about it. All one has to do is hit the right keys at the right time and the instrument plays itself.”

That quote was probably delivered with a heavy dose of sarcasm. If only old Bach was right and playing an instrument was that easy.

If playing an instrument well or singing well could happen only by wanting it badly enough, there would be many more great musicians in the world than there are. But that’s not how it works. To learn an instrument you’ve got to practice. Oops, I said a bad word.



I don’t like to say the p-word. When I think of the word “practice,” what usually comes to mind is a boring task, one which I’m forced to do. So let’s do away with that word.

Why did Mozart have to get rid of his chickens?

They ran around the yard saying, “Bach, Bach, Bach.”

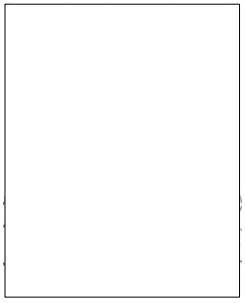
I prefer a friendlier p-word. Play. Which would you prefer saying, “I’ve got to go practice.” or “I’ve got to go play.” I don’t know about you, but I like the second much better. If you think you have to say the p word, try rehearse instead.

What does play mean? You play music. It’s supposed to be fun. If it’s not, something might be wrong. I say might be wrong because no matter what you do in this life, if you do it often enough, no matter how much you like it, there will be times when it doesn’t seem so pleasant. Especially when you push yourself toward improvement. It’s bound to get frustrating once in a while. Not to worry. Those feelings pass.

In order to do something well, you have to spend a lot of time doing it.
This may seem obvious but you would be surprised by how many students—especially the younger ones—don’t quite understand this.
Whether it’s sports or art or business or any old thing you care to name, to become something more than a beginner takes focused effort and time.

Now, keep in mind there are some people out there who are so naturally gifted that they need little time to master a skill. They’re the type of people who can pick something up—art, sports, music, dance, mathematics, Spanish—and start doing it well almost immediately.
They’re the kind of people we admire and envy. They’re the kind of people we secretly want to strangle.

What this section is geared towards is you and me. People with average abilities, average intelligence and average coordination. And even so, if you are one of those rare and gifted individuals, this section will help you too, so don't skip it.



A Note on Private Teachers

No book can teach you everything, or teach it as well as a good private teacher can. The fastest way to learn anything is one-on-one, just you and the teacher in a room. Half an hour each week is pretty standard for beginners, but an hour is better.

A good teacher can save you years of time and show you tricks that make playing much easier, and more fun. A good teacher knows what songs you can handle, knows which ones are fun, and will show you things you aren't doing quite right as well as how to do them better.

A good teacher is invaluable. Find one. Study with him or her until you've soaked up all you can (usually 2-4 years), then find another and do it all over again. You'll learn the most this way, the fastest this way, and you'll never regret the money you spend. It's well worth it.

Good teachers aren't cheap though, and if you can't afford one you have several options. One good alternative, especially if you're a beginner, is to find someone who plays your instrument and is further along than you are (high school and college students work well). Another way is to find musicians that will let you hang out with them while they play. You can

pick up a lot of free tips this way.

How Much is Enough?

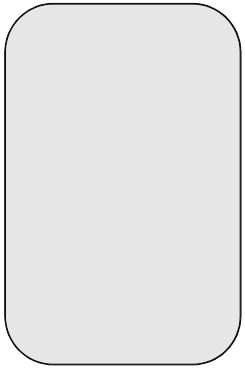
This is one of the most often-asked questions, and it’s a lot like asking
how much you should pay for a pair of shoes. The answer depends on
many things: what do you want to spend, what can you spend, what do
you need, what quality do you want, what style, etc., etc.

As far as playing music is concerned, you should be aware of a few
things: your desire to play, your ability on the instrument, and how much
time you can make to play (I purposefully didn’t say, “how much time
you can spare,” because nobody can spare time—everyone is always
busy).

The very best answer is: play as much as you feel like. That may seem like a cop-out answer, but let me explain. Playing is supposed to be enjoyable, first and foremost, never forget that. When you learn something new, there is a very high possibility of frustration. Avoid this like the plague. If you begin to feel frustrated, keep at it another couple minutes to see if the frustration goes away, and if it doesn't, stop. It's that easy. Pick it up again later in the day or tomorrow.

Come on Baby, Light my Desire

The single most valuable thing you can have is your desire. Foster it. Imagine yourself playing somewhere. Anywhere. You could be on stage in front of 10,000 screaming fans, you could be at Carnegie Hall, you could be at the local coffee shop, you could be playing a song for a loved one, or even in a room alone playing for yourself. There are many excellent players in the world who play only for personal enjoyment. Use your imagination to see yourself performing, keep with it and you'll get to experience it!



Desire will keep you motivated through exercises and repetitions and slumps in mood. The only problem with desire is that it's not like a metronome. You can't bop down to the local music store and pick some up, so you've got to foster it, be aware of it, let it grow. You can't buy it, but there are ways to increase it.

Take a music bath once or twice a week for a few

Live Music is Best

seasons, and you will find that it is to the soul what the water bath is to the body.

Oliver Wendell Holmes, Jr.

The single most beneficial thing to your development as a musician is to go see music performed live. It will increase your desire to play more than any other thing. There are many places to hear live music: coffee shops, concerts, even just sitting around in a friend's living room and listening to her play. Somehow, seeing music being done right in front of you makes it more real, more within reach. Recordings are great, but live is better.

Your Stereo is Next Best

Listening to good music is important and can be very inspiring, especially if you realize the musicians you listen to were once as clueless as you may be right now. So listen as much as you can.

If you like grunge rock, get the best there is and listen to it. If you like
speed metal, find the best and listen to it. If you like classical music,
find the best symphony orchestras under the best conductors and listen
to them. I could go on, but I'm sure you get the idea. Find the best.

And the best is simply what you like best. Don't give up. There is so
much music out there that most of it will do nothing for you. But on
the other hand, there is so much music out there, you're bound to find
something you love to hear. And you'll love to play it, too. Keep your
ears out and wide open.

How to Get Better

Beginnings are Delicate Times

If you're a beginner, it's essential to take things slowly. As a beginner
you're trying to get the hang of a very complex task that involves many
different and difficult skills, and it takes time. Stick with it. You'll get it.
I have never run into someone who has said, "Gee, I'm sure glad I quit
playing my guitar/clarinet/trumpet/piano." It's always the opposite.

Tack up encouraging notes to yourself. On my desk I have a fortune
cookie message which says, "Be persistent and you will win."

As a beginner, your playing sessions might be ten to fifteen minutes,
three or four times a week. The less you play, the longer it will take to get
better. Remember this. It seems very common sense, but I see it all the

time with new students—playing is difficult and unfamiliar at first so
they don’t play much or not at all and it remains difficult and unfamiliar
and frustrating.

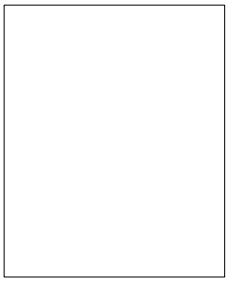
The less you play, the longer it will take to get better. There is no
getting around this. Once a week will simply not cut it. Of course it’s
better than nothing, but it’s too easy to forget all that information over a
week’s time and when you get back to your instrument, very little will
have changed. This will be very frustrating. Avoid frustration by playing
more often.

Play as long as you can, but don’t push it too hard. Remember that the
best indication of when it’s time to stop is your frustration/boredom

level. You have your whole life to work on this. Don’t be lazy, but don’t overdo it either.

Improvement

As you continue to play, you’ll become better and better and the amount of time you spend on your instrument will naturally increase. This will happen for several reasons: you’ll be able to play more songs, your understanding of what you need to do will increase, your skill exercises will take longer to go through, and the very best part is that it will become more and more fun!



Don’t Beat Yourself Up

Remember that it usually takes a long time to sound really good, and the progress is gradual. Anyone who plays an instrument has been a beginner at one point. And let’s be honest. Beginners make some really funny noises: squeaks, blats, bellows and bleats. We’ve all done it. It’s part of the process of becoming better. Have the patience to wait out your frustrations and the funny sounds you might make. Things will get better. I promise, but only if you stick with it.

Start a New Habit

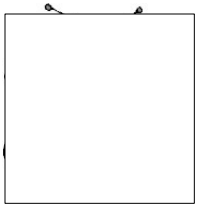
We are creatures of habit. Starting new ones is easy enough, and breaking old ones is sometimes painful. If you can make playing music an old habit, you’ll never have to worry. It’s a habit you’ll never want to break.

One way to grow this habit is to choose a specific time every day to play.

Have a routine. This will take some time to figure out and will change as you discover what works for you. Try different times of the day. Some people like early mornings and sit in a quiet house with a latté and strum their guitar, some play right after dinner or after school, some like to play just before going to bed (this option doesn't' work well for brass players, unless they live far from others).

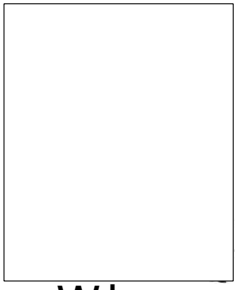
Take at least one day off a week, two at most, to give yourself a rest— take a hike, read a book, take a swim, a nap, anything. Of course, if you don't want to take a break, that's also a good option. There are no rules.

Television



My first piece of advice is to throw the time-bandit out. No? You're unwilling to do that? Okay then, use it to your advantage. During one hour of prime time television there are over twenty minutes of advertisements. That's twenty minutes you could use to play. And besides, you don't need to buy all that stuff people are trying to sell you. Save your money and buy a nicer instrument instead. Press the mute button and play! (This technique works best for single people…)

When in Doubt, Leave it Out



I leave all my instruments out and ready to play. I have to be careful when I pick one up because once I do, often it's at least an hour before I can put it down again. By leaving your instrument out you can pick it up at a random moment and toss off an exercise or a song. Five minutes later you're back to what you were doing before.

Where to Do It

A Garage of One's Own

When I was a kid and had to practice trumpet (I use the p word on purpose—back then I didn't know the difference), my parents finally ended up sending me to the garage. It sounds cruel, but it was an excellent thing. They didn't have to hear my squawks and blats, and I didn't have to feel self-conscious about making so much noise.

When you start to play an instrument as a beginner, your self-image as a musician is very fragile. You'll feel self-conscious, maybe a little silly, and you'll be very aware of how bad you sound.

Yes, it's true. You will sound bad at first. That's part of it. For some it can feel embarrassing, and for others simply uncomfortable. Only a rare few don't care. If you're one of these, consider yourself lucky. If you do feel uncomfortable playing with others around, the solution is to play when you have lots of privacy, either when nobody else is home, or in a separate building. Even a closed door is better than nothing.

Repetition is the Mother of Success, and the Father of Irritation

Charles Reynolds, a master teacher and man of great enthusiasm coined the first part of that phrase, and I added the second. When you're learning to play a song, you must play it over, and over, and over, and over, often hundreds if not thousands of times. And not the whole song at once, but measure by measure until you've got the whole thing. Then you get to play the whole thing over and over and over.

It's a lot like jet skis—plenty of fun for the one doing it but not fun at all for anyone who has to listen to it. Even if you're Yo Yo Ma or James Hetfield, the same phrase or scale or exercise played over and over and over again will drive even the most patient person bug-nuts.

Get a private place to play if you can. Those you live with will love you for it and will enjoy your music more when you're ready to perform it for them.

How to Do It

There are as many ways to play as there are people who play, but all of them share some similar characteristics. There are certain tools which can make your progress on an instrument or voice much faster.

Some of these tools are crucial, some are less so, but all of them will put you further down the road toward musical mastery if you use them

correctly.

Equipment

Arturo Sandoval, a world-renown trumpet player, grew up very poor in
Cuba. He wanted to play very badly. He would walk miles to the next
village where someone had a copy of Arban’s Complete Conservatory
Method for Trumpet, a book that is hundreds of pages long, crammed
full of thousands of exercises and songs; the trumpet player’s bible.
Because he couldn’t afford the book, Sandoval kept returning to the
distant village until he had the whole book memorized.

All you really need is your instrument and desire. The rest will come.
However, here are some things which will make your experience much more pleasant and more successful in a shorter time. In order of importance they are:

- instrument: If you're a singer, you won't have any problems with forgetting it somewhere. Get the best instrument you can afford and treat it well.
- metronome: Apart from your instrument, this is the most useful tool you can own as a musician. Get one early on and use it often. I'll discuss its use later in this chapter.
- music: This may be method books, sheet music, or both. Not every practice session will require music. There are many things that can be done without it.
- music stand: There are many different types, from inexpensive fifteen dollar wire stands which fit in an instrument case to beautiful and expensive hardwood stands which aren't so portable.
- pencil: This will be used to mark up your music with notes to yourself and also to record your sessions if you choose to do so. Keep several in your case so you'll have one when needed.
- practice journal: A spiral notebook in which to keep a record of what you play, how long you play, and how you feel about

your playing. This is a valuable tool to look back on. Not a requirement, but a good idea.

- tape/CD player: A very useful tool. Not only to provide good music to listen to, but also something you can try playing along with. Trying to figure out a favorite song is good training for your hand-ear coordination.

- tuner: A tuner can tell you exactly what pitch you play, and whether it’s in tune or not. You’re now in the world of sound and a small change of pitch is audible to most listeners.

• tape recorder: Not essential, but very helpful. Hearing yourself recorded is much different than hearing yourself while playing, and you'll be surprised how many mistakes you hear that you weren't aware of while you recorded. The tape recorder tells no lies.

• instrument stand: Not essential, but useful. If you leave your instrument out you'll pick it up and play more often. My guitars, trumpet and flute are always out on their stands.

The Ideal Session

The Best Time

Directly after a lesson is the very best time to practice. When all that new information is fresh in your head, take the time to go over it again on your own. If there is something you don't understand, write down any questions or problems you may have so your teacher can explain them in your next lesson.

Warm-up

This is a short part. Use it to make sure your instrument works properly, is tuned, and you have all you need for the coming session (valve oil, music, extra strings, reeds, pencil, etc.).

Depending on your instrument, there are several things you want to keep in mind. Generally speaking, keep things in the low register of your

instrument and do exercises to get you fingers, your wind, and your brain
warmed up.

Exercises

If a playing session is a meal, this section is the broccoli. It may not taste
very good (unless you like lots of cheese), but it’s good for you. Do the
exercises for your instrument religiously—it will pay off. Dessert is
coming up.

This is when you do your scales, finger-stretching exercises, long tones,
interval studies, chord progressions…whatever your teacher assigns you.
The list is nearly endless, but your time is limited. Keep time spent on
exercises down to about 1/3 of the session time you'll spend playing.

If you're a beginner and none of the above makes sense to you, don't
worry, it will soon.

Long Tones

When I was a beginner in middle school, my mom made me practice
for half an hour every day, five days a week. Some of the time I hated
it, but I'm very grateful now. On the days I really didn't want to be at
it, I would choose one note and play it for the entire half hour. Well, I
did stop to breathe now and then. If I got daring and a little less
stubborn, I might switch to another note. I didn't know it, but I had
stumbled upon an essential ingredient to creating a good sound on any
instrument.

When you play long tones, take a huge breath (if you're a wind player)
and play a note that is comfortable for you. Don't let your mind
wander, though. Listen closely to the sound. Make it as perfectly clear
and clean as you are able. You'll be surprised at the wavering and
crackles and hitches in your sound.

Experiment with different qualities of sound (bright, dark, open,
pinched, soft, loud, etc.)

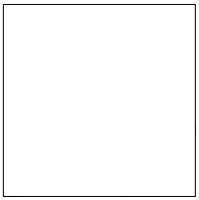
If you’re a string player, long tones are equally important but done
differently. It’s a good way to improve your bowing, or to check your
finger position all the way up the neck on each string.

I take the time to mention long tones because they’re often neglected
and are important to achieve a good sound. And they’re so easy to do!
Especially for beginners. Three or four minutes is long enough. Do
them every day and you’ll soon have a great sound on your instrument.

The Heart of the Session

Here is where you will do most of your work. This is the longest part of
your playing session. This is where you work on the song you’re learning
to perform. Use the tuner, the metronome and the tape recorder.

The Metronome (or: The Torture Device)



There is a legend about Chinese Water Torture. I have no idea if it's true, but it makes for a good story. You're strapped down to a table and above you is a barrel full of water. The barrel has a small hole in it through which a tiny drop of water falls every minute or so down onto your forehead. This goes on for a long time, finally driving you mad.

Close your eyes and repeat three times, "The metronome is my friend."

The metronome is kind of like that, only it's actually good for you.

A metronome is a mechanical foot-tap which keeps perfect time. Each metronome has a series of gradations on it, usually from around 40-200 beats per minute (bpm). The higher the number, the faster the clicks. You set the metronome on the tempo you need and away you go.

Metronomes come in many different shapes and sizes. There are electronic varieties with different beeps and dings, or the simpler wind-up pendulum variety like the one pictured. Loudness of your instrument and the metronome is a consideration when buying one. Some have an earplug that will send the clicks right to your ear, a good option for loud instruments, like drums and brass.

Nobody likes being wrong. That's one of the reasons metronomes are so neglected. They keep perfect time and we humans do not. But if you think about it, we learn the most when we're wrong, as long as we're paying attention. So really, being wrong can turn into a good thing.

Of course staying wrong is not a good thing. You use a metronome to
fix mistakes in rhythm.

How to Use the Metronome

When you’re learning a song, use the metronome on only a short
section at one time—several measures at the most, two notes at the
least. It’s important to start slowly. Whatever you learn is what you
will play, so if you set it at a speed which is too difficult, you will
learn mistakes.

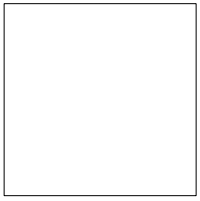
1 Set the metronome to a tempo that is slow enough so your playing feels
comfortable and easy. Play the short section through a few times at this
tempo. If you’re making mistakes, the tempo is too fast. Slow it down

some more until you find an easy tempo. Play 5-10 times correctly
before going on.

2 Click up to the next fastest tempo. One click only. The clicks may not
sound any faster, but when you play the passage you'll notice the
difference. Play at this tempo until it's easy. Play 5-10 times perfectly.

3 Click up to the next fastest tempo. One click only. Play the section
several times at the new tempo. It may take more repetitions to get the
passage perfect. Keep at it. If it's too hard at the new tempo, go back
one click until it's perfect again. Play 5-10 times perfectly.

4 Continue with this process until the correct tempo of the song is
reached. This may take several days, weeks or months.



Remember, you're in this for the long haul. Don't bash your head against
something for too long. If you become very frustrated or discouraged, go
back to a slower tempo and play it a few times correctly before you quit.

The first song I learned on guitar was much too difficult for my abilities
and I probably shouldn't have chosen it, but I did. At first, the song was
so incredibly slow it was unrecognizable. It took about three or four days
(of two hours a day) to get each 4-measure passage up to a decent speed.
Using the metronome as mentioned above, I learned the song, but it took
me six months.

You may not be so foolish as to choose such a hard piece at first, but if
you do, using the metronome works very, very well. Try it. Play with it.
Come up with your own variations. There are no rules.

The Tape Recorder Tells No Lies

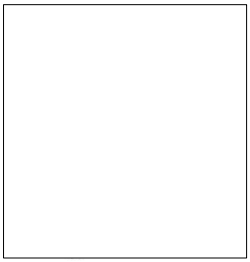
I got my first stereo when I was eleven. It had a tape deck with a
microphone attachment. During my enforced practice sessions, I came
up with a plan to get away with not practicing. I'd record something on
the tape deck, then turn up the volume and play it back, sometimes twice.
That way everyone in the house would think I was still playing. Ha!
That'll show them, I must have thought. I'm not actually practicing.

But I was. Listening to yourself play an instrument on a recording is a lot
like listening to your voice on a recording. It doesn't sound anything like
what you thought it sounded like. Every little wobble and flub and

mistake is painfully obvious. Again, we learn the most from making
mistakes.

But as with the metronome, don't let those mistakes stand. Fix 'em.

Try recording yourself. You'll be surprised, and you might like doing it.
You will definitely improve!



You Can Tune a Trumpet but You Can't Tuna Fish

A tuner is a valuable tool. If you play a fretted instrument like guitar or
electric bass, you'll probably need a tuner only to tune your strings.

The rest of us benefit a lot by using a tuner. With a tuner, you can become
more aware of how your instrument plays, where it's out of tune, and
what you need to do with your mouth or your finger placement to correct
the pitch. Every wind instrument has certain notes which are out of tune.
With a tuner you can find these out-of-tune notes on your instrument.

The best type of tuner for this sort of thing is an analog tuner, one which
has a little arm that swings back and forth to show how sharp or flat you
are. If the little arm is straight up at "0," you're in tune.

There are many types of tuners. Visit your local music store for a
demonstration and decide which will work best for you.

Other Ways to Play

You aren't limited to playing only during your daily session. There are

opportunities throughout the day to hone your skills, and you don’t even need your instrument.

For brass players, there’s always buzzing (if you don’t know what this is, ask a brass player to demonstrate for you). This can be done either with or without a mouthpiece. For other wind players there are other lip-strengthening exercises.

Using only your lips (no teeth), hold a pencil out parallel to the ground for as long as you can. This will strengthen your pucker muscles.

For fingerings, woodwind players can practice on a pencil. Valve players can get an old valve casing from an instrument at the pawn shop and carry that around instead of the whole instrument; or simply do fingerings on your thumb or palm. String players can find an old instrument, saw off a five-fret section of the fingerboard and use that to practice fingering.

These are just a few suggestions. Use your noggin to think up some other options. There is a lot of “down” time in a day that you can use to improve yourself.

Another Instrument

Don’t be afraid to switch instruments. If an instrument just isn’t working, give it a fair chance for two or three months. Then, if you still want to play, try something else.

I have a wonderful guitar student who began on the trombone. After a couple months, she decided the trombone wasn’t for her and switched to guitar. She’s playing very well and is progressing quickly. She was not good on trombone. She’s becoming an excellent guitar player.

Even if you’re doing well on an instrument you can always pick up another. Another of my students, a good beginning trumpet player expressed interest in the flute, so we had a flute lesson and he has decided to play that as well.

Many famous musicians started on a different instrument and continued on to learn many others. Stevie Wonder, Prince, and Beck play all the

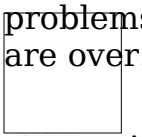
instruments on their early albums. Beck still does it. Those three are only
a few. There are many more. Nowhere is there a rule that says you can
only play one instrument. Heck, learn ‘em all if you want to. A new
instrument can light the fire inside you again.

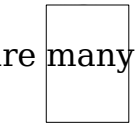
And if you can read music, learning songs on a new instrument is much
much easier.

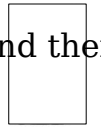
Speaking of reading music, let’s get back to it!

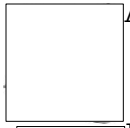
Some Instruments

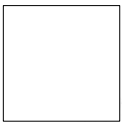
Ever wonder what all those instruments are? Ever call a trombone a
trumpet, or other embarrassing faux pas? Now some of your problems
are over. Below are many instruments and their names.

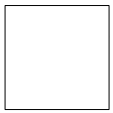

Accordion

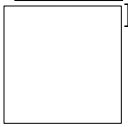

Bass Clarinet


Bassoon


Banjo

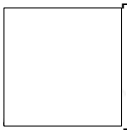

Oboe

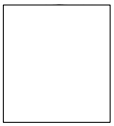

Tenor Flute

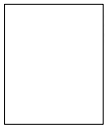

Piccolo

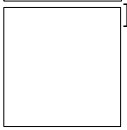
French Horn

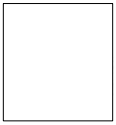
Flugel Horn

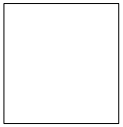

Trombone

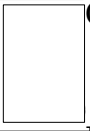

Alp Horn

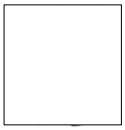

Baritone Horn

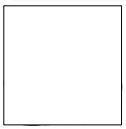

Baritone

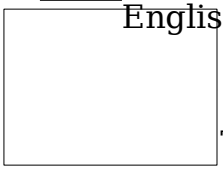

Tuba


Timpani


Castanets


Sitar


Washtub Bass


English horn

Cello

Double Bass

The saxes

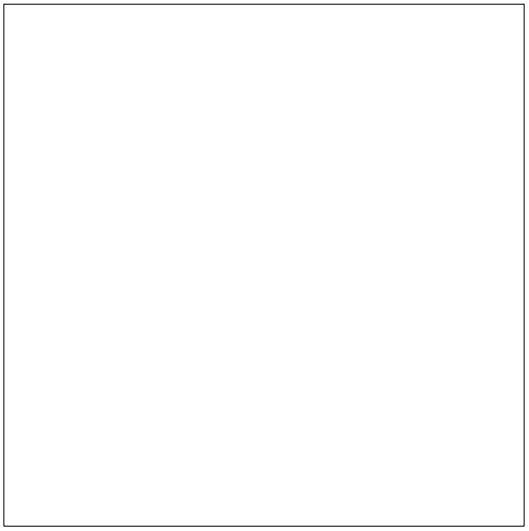
For loads of information about your instrument, visit the Questions, Ink
web site: www.QuestionsInk.com/instruments

PART FOUR

See Sharp or Be Flat

In This Section You Will Learn:

- Sharps, Flats, and Naturals
- The Piano Keyboard
- Whole Steps and Half Steps
- Major Scales
- Key Signatures



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CHAPTER 19

ACCIDENTALS ON PURPOSE

Roaming through the jungle of "oohs" and "ahs," searching for a more agreeable noise, I live a life of primitivity with the mind of a child and an unquenchable thirst for sharps and flats.

— Duke Ellington (1899 - 1974)

In This Chapter

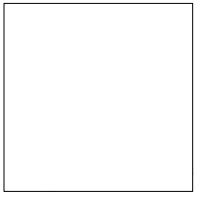
- General Accidental Information
- Flats
- Sharps
- Naturals
- More Accidental Rules

Accidentals Are No Accident

The pitch of a note can be altered in two ways—slightly lowered, or slightly raised. This is shown by symbols which appear in front of the note on the staff, and they're called accidentals. Though I know the use of the word accidental began around 1651, I'm not really sure why, because these changes are made on purpose. They should be called onpurposes. But we're stuck with accidentals, so that's what I'll call them.

There are three types of accidentals: flats, sharps, and naturals. Each has its own sign, shown below.

Example 19.1 The Accidentals.



General Accidental Information

Accidentals appear in front of the note they alter. This is so that when you're reading music, you see the accidental before you get to the note. If the accidental was placed after the note, it would be too late. Putting the accidental after the note is a very common mistake that a lot of people make who are unfamiliar with writing music.

However, there is a good reason for this mistake. When written, the accidental comes before the note, but when spoken, the accidental comes

after the letter name of the note. For example, even though you say B flat,
the actual note in the treble clef is on the third line with a flat sign in front
of the note, like so:

Another common mistake is to write the accidental just anywhere in front of the note it is supposed to alter, but actually, the accidental should be written on the same line or space as the note it alters. Each accidental has an open spot in the center which is placed on the line or space. You'll see what I mean in the examples to follow.

Remember that when notes are above or below the range of the staff they need leger lines. Accidentals don't need a leger line; they simply hang in front of the note which uses the leger line.

Flats

A flat lowers the pitch of a note by a small amount (a half step, a term you'll learn in the next chapter). One way to remember a flat lowers a note's pitch is that when something is flattened, it's lower than it was before it was flattened.

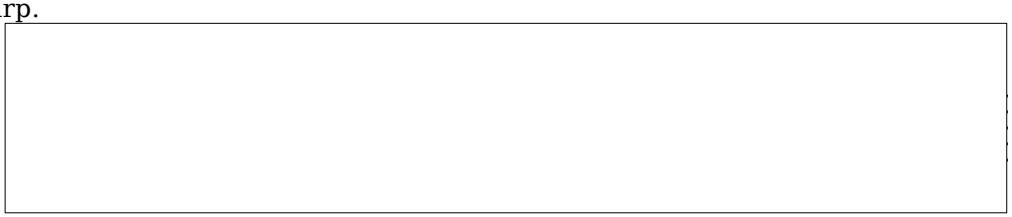
Flats look a little like a squashed letter b (or maybe I should say flattened letter b), and the open part in the center of the flat is the part which will be on the line or the space. Although I've only shown you six notes below, a flat can be used with any note.

Example 19.2 From left to right: B flat, D flat, E flat, A flat, B flat, D flat, and A flat.

Sharps

A sharp raises the pitch of a note by a small amount (also a half step) and
looks like a number symbol. The center of that little grid is where the
sharp should be centered on the line or space. Just like with flats, a sharp
can go in front of any note.

Example 19.3 From left to right: D sharp, G sharp, C sharp, F sharp, A sharp, C sharp, F sharp.



Naturals

Naturals are a little different from sharps and flats. A natural sign
cancels the effect of a sharp or flat, and is used for this purpose only.
Any note which isn't affected by an accidental is already a natural note.
In fact, all the notes you've seen before this chapter have been natural
notes. When there aren't any sharped or flatted notes to be changed, the
natural sign isn't used.

So a natural can either raise or lower the pitch of a note. If a natural
cancels a flat, it raises the pitch of a note by a half step. If a natural
cancels a sharp, it lowers the pitch of the note by a half step. And you've
already guessed that a natural can be used with any note.

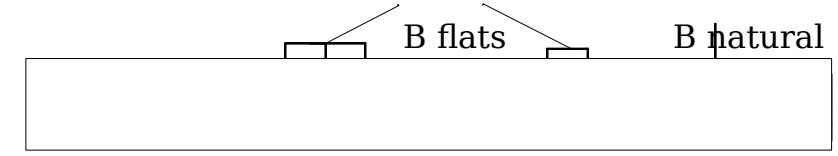
Example 19.4 From left to right: B natural, D natural, E natural, D natural, A natural, C natural.

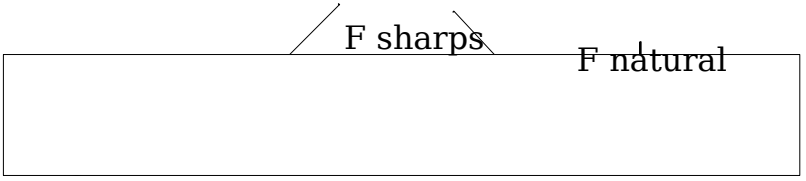
More Accidental Rules

When an accidental is used at the beginning of a measure, it’s effect lasts
for the entire measure. For example, if at the beginning of a measure we
have a B flat, and then at the end of the measure there is another B, it is
also a B flat unless there is a natural sign in front of it.

An accidental can’t have an effect over a bar line.

Example 19.5 The effect of an accidental lasts for the entire measure and is canceled by the bar line.





Moving On

That's it for accidentals: sharps raise, flats lower, and naturals cancel.
Once you're able to answer the review questions about accidentals, you
can move on to the concepts of whole steps and half steps.

But before we do that you'll get a quick lesson on the piano keyboard in
the next chapter. Knowing the keyboard will make whole and half steps
much easier to understand.

Chapter 19 Review

1. What does an accidental do?

1. Slightly alters the pitch of a note

2. What are the names of the accidentals?

2. Flat, sharp, natural

3. Where are accidentals written?

3. In front of the note and on the same line or space as the note

4. What does a flat do to a note?

4. *Lowers the pitch by one half step*

5. Draw five flats.

6. Draw five sharps.

7. What does a sharp do to a note?

7. Raises the pitch by one half step

8. Draw five naturals.

9. What does a natural do?

9. Cancels a sharp or a flat

10. How many notes can accidentals be used with?

10. All of them

11. How long does the effect of an accidental last?

11. For an entire measure

12. Can an accidental have an effect across a bar line?

12. No

Practical Use

1. Write out the following whole notes: B-flat, E-flat, A-flat, B-flat. Find these notes on your instrument and play them. Sing them. Now write out these notes: D-flat, G-flat, C-flat, and D-flat. Find them on your instrument and play them. Sing them. Sound familiar?

2. Do the same thing as you did in number one with these notes: F-sharp, A-sharp, C-sharp, F-sharp. Find them on your instrument and play them. Sing them. Now write out C-sharp, E-sharp, G-sharp, C-sharp. Find and play these notes. Sing them.

CHAPTER 20

THE PIANO KEYBOARD

Music is perpetual, and only the hearing is intermittent.

— Henry David Thoreau (1817 - 1862)

In This Chapter

- Note Names on the Piano Keyboard
- Flats and Sharps on the Keyboard
- Half Steps
- Enharmonic Notes
- Natural Half Steps
- Whole Steps
- Chromatic Scale

Why Learn the Keyboard?

Notes are laid out on the keyboard in a very simple way which is easy to comprehend, and the visual aid is a great help when trying to understand nearly all of the concepts you'll find in this and other sections.

In fact, one of the definitions of a half step is two adjacent keys on the piano, so there you go.

If you've been using your keyboard template on the Reviews, you've already become familiar with the keyboard, and maybe even some notes on it.

I don't want to insult your intelligence, but I've got to say it. Lower notes are toward the left of the keyboard and higher notes are to the right.

Note Names on the Keyboard

All of the white keys are natural notes, (A-G). All of the black keys are notes with accidentals (sharps or flats). Notice in the keyboard below how the black keys are grouped: two black, then three black, then two black, etcetera, etcetera, all the way up and down the keyboard.

Any white key to the left of a group of two black keys is the note C. Any white key directly to the left of three black keys is F. If you'd rather find the A because it's the beginning of the alphabet, it's between the second and third black keys.

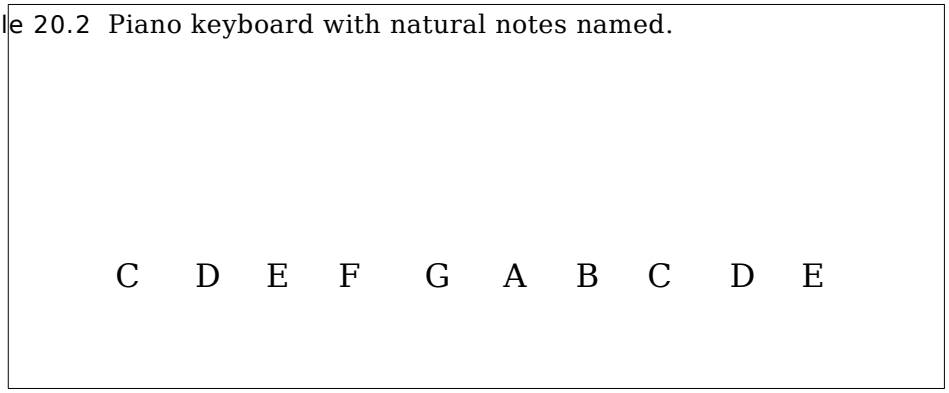
Example 20.1 A short chunk of the piano keyboard.

C F A

20: The Piano Keyboard

From there it’s easy to fill in the rest of the note names, like so:

Example 20.2 Piano keyboard with natural notes named.

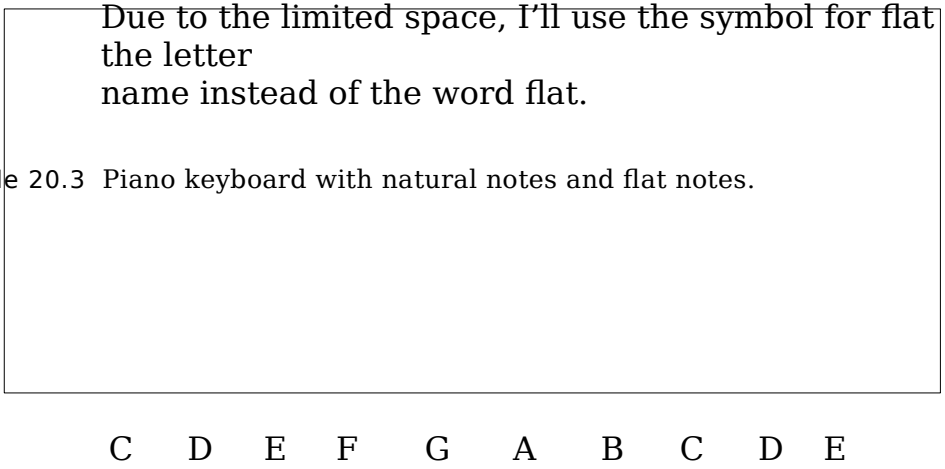


Flat Notes on the Keyboard

Any black key directly to the left of a white key is a flat note (remember
to the left is lower). The note’s name is derived from the natural note. So
the black key just to the left of the A, is A flat. The black key directly to
the left of the D is D flat. And so on.

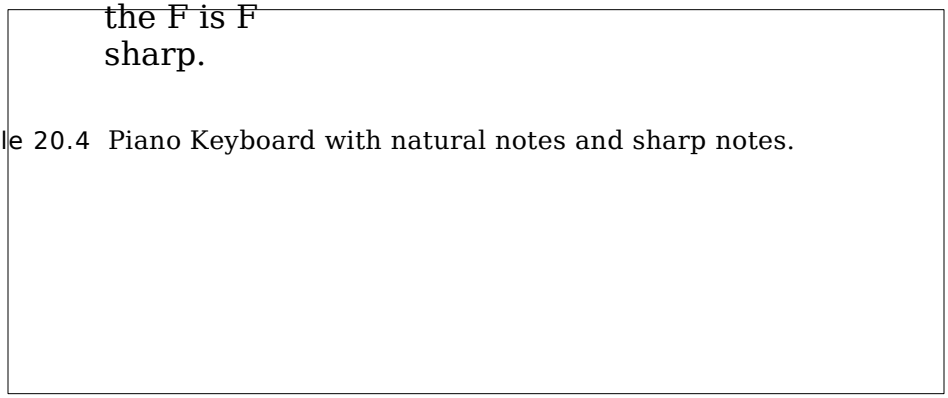
Due to the limited space, I’ll use the symbol for flat (b) next to the letter
name instead of the word flat.

Example 20.3 Piano keyboard with natural notes and flat notes.



Sharp Notes on the Keyboard

A sharp note is any black key to the right of a white key (remember to the right is higher). The sharp note names are derived from the key directly to the left of the black key. For example, the black key directly to the right of the C is C sharp. The black key directly to the right of the F is F sharp.



Example 20.4 Piano Keyboard with natural notes and sharp notes.

Enharmonic Notes

You probably noticed that each black key has both a sharp name and a flat name. When notes have the same pitch but different names, they're called enharmonic notes.

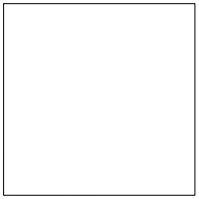
Enharmonic notes are a lot like homonyms, words that sound alike but mean different things, like the words to, too, and two. Enharmonic notes are the same pitch but have different meanings.

A common question is, "Why bother? Doesn't that make things confusing?" Well, yes, it does make things a bit confusing but there are several good reasons for enharmonic notes. The first I'll show you later

in this chapter; others will have to wait until we get to scales and chords
in Parts V and VI.

Half Steps and Whole Steps

A half step, as it's defined by Webster's, is one twelfth of an octave, but that definition doesn't help us much. A better definition for a half step is the difference in pitch between any two adjacent keys on a piano. Or, if you're more familiar with the guitar or electric bass, a half step would be the difference in pitch between any two adjacent frets on the same string.



Natural Half Steps

This is a really important concept and will cause you no end of confusion if you don't understand it, so put your thinking cap on.

Most half steps involve some kind of accidental, like B to Bb, or F# to G, or C# to C natural. But if you look at the keyboard, you can see that there are two places where there is no black key between two white keys. Go ahead. Look right now and see if you can name them. I'll wait.

Remember our definition of a half step? Any two adjacent keys on the piano, right? So those notes—E to F, and B to C—are also half steps, but without the need of any accidentals. These are called natural half steps and if you memorize them now, you won't have to memorize them later.

Whole Steps

Two half steps make a whole step.

The Chromatic Scale

I guess first we have to define what a scale is in music. According to
Webster's it's a graduated series of musical tones ascending or descending in order of pitch according to a specific scheme of their
intervals. And actually, that's a pretty good definition, so we'll use it.

The chromatic scale is the first reason for the existence of enharmonic
notes. The scheme of intervals in the chromatic scale is half steps.

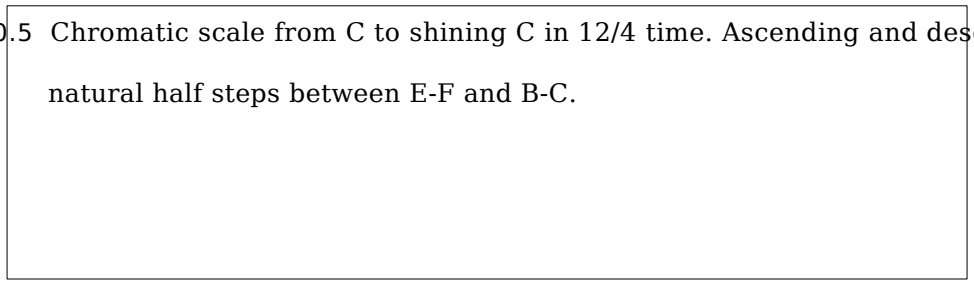
If you were to play a chromatic scale from C to C, you would begin at C
and play every single note going up until you got to the next C, and then

you'd come back down doing the same thing. Here's where the enharmonic notes come in:

As you go up the scale, sharps are used. As you come down, flats are
used. An example is worth a hundred words. For this example, follow
along with your keyboard.

Notice the example is two lines of music. When a song is long, the staves
below the first do not need the time signature, only the clef.

Example 20.5 Chromatic scale from C to shining C in 12/4 time. Ascending and descending. Notice the



Moving On

The piano keyboard will be a valuable tool in the chapters which follow,
so be sure you've understood it before going on. Not only will it help you
in the next chapters, it will also be valuable in your life as a musician.

Coming up next is the major scale, the basis for nearly everything in
Western music. A small and simple scale, but very important.

Chapter 20 Review

1. What is the definition of a half step?

in

2. What is an enharmonic note? Give a couple examples.

or

1. The difference

pitch between two adjacent keys on a piano keyboard

2. A pitch with two different names, like C# and Db,

F# and Gb

3. What is a whole step?

3. Two half steps

4. What are the two natural half steps?

4. B-C
E-F

5. Which accidentals are used when going up a chromatic scale?

5. Sharps

6. Which accidentals are used when coming down a chromatic scale?

6. Flats

Practical Use

1. Write out the chromatic scale from A to A in either clef. Refer to example
20.5 if you must.

2. Identify the notes on the keyboard (use the side with no note names :-).

3. From the note C, count up three half steps. What note did you get? It should
be Eb. Start on F# and count down two whole steps. What note did you get?
Should be a D.

4. Get in front of a real piano/keyboard. Find all of the E-sharps on the piano.
Find all of the C-flats on the keyboard. Find the F-flats. The B-sharps (hint:
enharmonic notes).

5. Mess around with the piano and find sounds you like. Write out the sounds
you most like. To get you oriented, the C in the middle of the piano is called

Middle C, and it’s written as a line note, one leger line below the treble clef
staff. Middle C in bass clef is written as a line note one leger line above the bass
clef staff.

CHAPTER

21

MAJOR SCALES

Without music, life would be a mistake.

— Nietzche

In This Chapter:

- The Major Scale
- C Major Scale
- The Octave
- The F Major Scale
- The G Major Scale
- The Db Major Scale
- The F# Major Scale

The Major Scale

I read on the Internet that if Western music were genetic material, the major scale would be its DNA. A more perfect analogy I have never heard.

The major scale is the basis for nearly all music you're familiar with, from country to hip-hop, classical to jazz, grunge to punk.

Other scales are described based on their relationships to the major scale. Intervals—the measurement of distance between two notes—are based on the major scale. Chord symbols are derived from the major scale.

Remember our definition of a scale. It's kind of wordy, and you don't need to memorize it, so here it is again: a graduated series of musical tones ascending or descending in order of pitch according to a specific scheme of their intervals.

With the chromatic scale, the scheme of intervals was half steps. With the major scale, the scheme of intervals is a series of whole and half steps. Remember that a whole step consists of two half steps.

Every scale has a letter name and a descriptive name. The letter is the bottom note of the scale and also the top note of the scale. The descriptive name tells you what kind of scale it is, like major, minor, blues, pentatonic, etc. For example, the D Major scale would start on D and end on D and have the necessary whole and half steps which make up a major scale.

Enough words. An example will show you the pattern of whole and half steps for a major scale. The scale we'll use will be the C Major scale, because it has no sharps or flats in it.

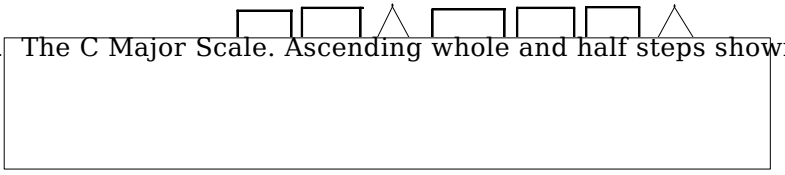
If you have your keyboard out and use it to follow along, you'll understand these concepts more quickly and more thoroughly.

The C Major Scale

Before I show you the scale, I've got to define a couple images which are used to show half and whole steps. They're simple, and a good visual reference.

half step: whole step:

If you have access to an actual keyboard, play the scale below. It will be
all white notes from C to C. You'll probably recognize the way it sounds.



Example 21.1 The C Major Scale. Ascending whole and half steps shown.

Whole and Half Steps for the Major Scale

Remember the natural half steps between E-F and B-C? In the C Major
scale, these natural half steps give us the pattern of whole and half steps
without the bother of accidentals.

As you can see above, the pattern for the C major scale: whole, whole,
half, whole, whole, whole, half (wwhwwwh). You'll need to memorize
this, because this pattern of whole and half steps is the same for every
major scale.

Octave

This is as good a place as any to introduce you to the octave, a type of
interval which contains a certain amount of notes. Like octopus and
octagon, the octave also has an 8 in it.

Look at the scale above, and count the notes from C to C. There are 8 of

them. That’s an octave. From one letter name to the next, either up or
down, is an octave.

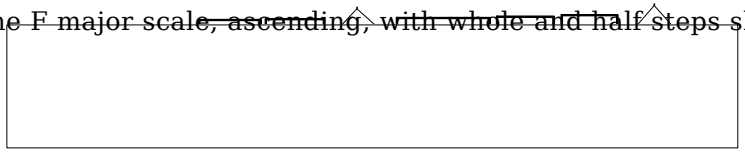
So, to be more specific, the above scale is the C Major scale, one octave,
ascending.

Scales with Accidentals

Now we can take that pattern of whole and half steps and apply it to
another scale. Let’s start on F this time.

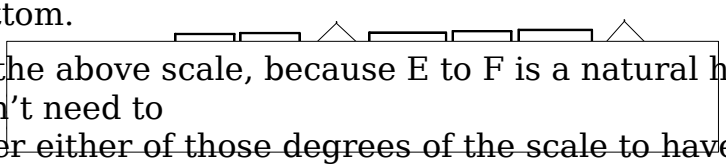
F Major Scale

Example 21.2 The F major scale, ascending, with whole and half steps shown.



In order for our series of whole and half steps to be correct (wwhwwwh),
we have to alter a note. Look at your keyboard while you examine the
whole and half steps in the F major scale to see where those half and
whole steps fall. That Bb is necessary to get the half step between the
third and fourth degrees of the scale. The Bb also gives us the whole step
between the fourth and fifth degrees of the scale.

A degree is a name for a scale tone, and is usually associated with a
number. For example the 4th degree of a scale is the fourth note from the
bottom.



In the above scale, because E to F is a natural half step, we don’t need to
alter either of those degrees of the scale to have the half step between the
seventh and eighth degrees of the scale.

G Major Scale

Example 21.3 The G major scale, ascending, with whole and half steps shown.

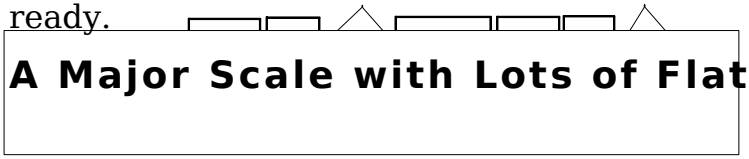
Follow along with your keyboard and you can see where the whole and
half steps should be for the Major scale starting on G.

Between the third and fourth degree of the scale we have the natural half
step from B-C, and between the seventh and eighth degree of the scale, in

order to have a half step, we need an F#. And it just so happens that
between the sixth and seventh degree of this scale we need a whole step;
E to F# is a whole step.

Major Scales with Many Accidentals

This same technique can be applied to a scale with any starting note. Just
for kicks, we'll do one with lots of flats and one with lots of sharps.
You'll need to follow along with your keyboard for this one, so have it
ready.



Example 21.4 The Db major scale, ascending, whole and half steps shown.

Example 21.5 The F# major scale, ascending, whole and half steps shown.

More Enharmonics

Use your keyboard to understand the following concept.

Take a look at the seventh degree of the F# major scale above. An E#,
right? The enharmonic note that is the same pitch as E# is F. It's that
natural half step between E and F that causes this. Similarly, B# is the
same pitch as C.

And going the other way, Fb is the same pitch as E, and Cb is the same
pitch as B.

Moving On

If you understand the major scale, you've got a powerful tool to unlock the intricacies of much of music theory. Be sure you know the ins and outs of this scale before you move on.

Coming up in the next chapter are key signatures, devices at the beginning of a piece of music that tell you which notes are sharp or flat for the entire piece.

Chapter 21 Review

1. What is an octave?

1. The distance from one note to the next note with the same letter name.

2. What is the series of whole and half steps for the major scale?

Twelve half steps

or 6 whole steps.

2. wwhwwwh

3. What is the symbol for a half step?

3.

4. What is the symbol for a whole step?

4.

5. Between which degrees of the major scale do the half steps occur?

5. 3-4, 7-8

Practical Use

1. On a blank staff using the clef of your instrument, write in an E-flat low on the staff. Use your keyboard to figure out the E-flat major scale. Write it down, then play it on your instrument. Does is sound right? Sing it.

2. Do the same thing, starting on A this time. Be sure to play and sing the scale until it's memorized.

3. Write out all 12 Major scales. Learn them on your instrument. They are of immense value in your progress as a musician!

CHAPTER

22

UNLOCK THE SECRET OF KEY SIGNATURES

Servant and master am I: servant of those dead, and master of those living. Through my spirit immortals speak the message that makes the world weep and laugh, and wonder, and love, and worship.
I am Music.

— Anonymous

In This Chapter

- What is a Key Signature?
- The key of C
- Mnemonics Revisited
- Flat Keys
- Sharp Keys

Key Signatures

Any piece of music has a certain feel which comes from several things,
like the meter, the types of notes used, and the key signature. The key
signature is a device which contains sharps and flats and tells the
performer many things: the type of scale the piece is based on, the most
likely starting and ending notes. If there is improvising in the song
(spontaneously making the melody), the key signature will tell the
performer which notes can be used. If a song is too high for a singer, the
whole song can be lowered, and this will give you a different key
signature.

Just like time signatures, key signatures come at the beginning of a piece
of music. The key signature fits between the clef and the time signature. I
have included a time signature in all of the examples so you can see
where the key signature should be placed. Most of the time signatures
will be familiar, but some are odd, so don't let that throw you.

A key signature is a device that tells you which notes have flats or sharps
for an entire piece of music. This saves the composer from having to
write in all the accidentals for an entire piece. The good news is that a
key signature will never have mixed sharps and flats. It will be either all
sharps, all flats, or no accidentals at all.

Another piece of good news is that the order of the flats and the order of
the sharps will always be the same. That is, if you have only one sharp in

a key signature, as long as you've memorized the order of sharps, you'll know what that sharp is. If you have seven flats in a key signature, as long as you've memorized the order of flats you'll know exactly which seven flats to use and what order to put them in.

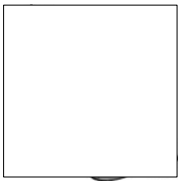
More good news. The order of the sharps is the reverse order of the flats, or vice versa, so you only have to memorize them one way.

Why Key Signatures?

When you constructed major scales in the last chapter, you had to alter some of the notes with sharps or flats to make the whole and half step pattern correct. Each key signature is also the name of the major scale of the same name. For example, the key signature of G will give you the correct accidentals for the G Major scale. A key signature at the

beginning of a song affects all the notes throughout the song, so the
composer doesn't have to write out all the accidentals for every single
note in the song. They key signature takes care of it.

Flat Key Signatures



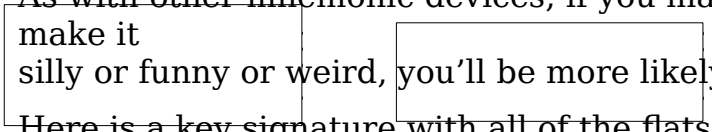
There are only seven flats, and they'll always be in the same order in a
key signature. This is one of the few rules that has no exceptions.

More Mnemonics

The order of flats is B-E-A-D-G-C-F. An easy way to remember this is
the word BEAD followed by Greatest Common Factor. Or you can make
up your own saying which uses all the letters in the proper order.
Something like, "Being Ethereal After Death, Ghosts Can Fly."

As with other mnemonic devices, if you make up your own and make it
silly or funny or weird, you'll be more likely to remember it.

Here is a key signature with all of the flats in it. Notice the order (from
left to right) and where the flats are placed on the staff.



Example 22.1 A key signature in both treble and bass clef with all seven flats.

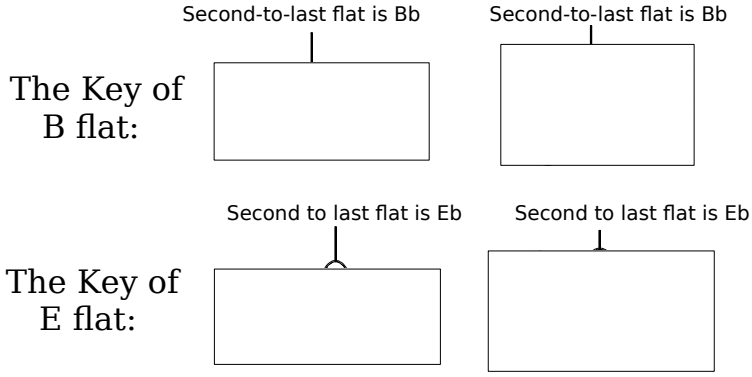
Find the Name of a Flat Key

If you're faced with a piece of music with a bunch of flats in the key

signature, there is an easy way to find out what key it’s in. The name of
the key is the same name as the second-to-last flat in the key signature.

An example will show this better than words can:

Example 22.2 The keys of Bb and Eb.


Second-to-last flat is Bb
Second-to-last flat is Bb
The Key of B flat:
Second to last flat is Eb
Second to last flat is Eb
The Key of E flat:

Construct a Flat Key

To create a flat key, there are three easy steps:

1 Find the name of the key you want in the order of flats. For example, if we're looking for the key signature for A flat, we'd find where the letter A is in the order of flats: B E A D G C F.

2 Add one more flat beyond the key signature name, and use all of the flats up to that point for the key signature. In our example, one flat beyond Ab would be Db, for a total of 4 flats.

3 Construct the key signature, putting the flats in the correct order, and on the right line or space.

And that's all there is to it.

The Key of F

There is one flat key which is a little different than the others, and that's the key with only one flat in it. Because there's only one flat, there can't be a second-to-the-last flat.

You can sort of use the same procedure above to find the name of the key
with one flat. If you look at the order of flats, B is the first one. Before the
B is the one at the end of the line—F, which is the name of the 1-flat key.

Here’s a more visual representation of what I’m talking about.

Here’s the B flat in the key signature

B E A D G C F

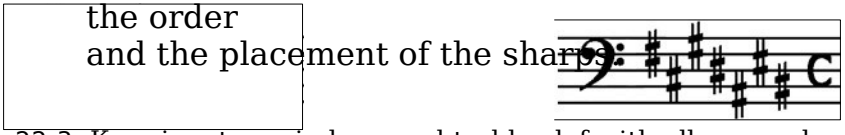
And here’s the name of
the key with one flat: F.

Or you could just memorize that one flat is the key of F. Whatever works
best.

Sharp Key Signatures

Hopefully you’ve already got the toughest part learned, which is the
order of sharps. It’s the order of flats backwards, or: F C G D A E B. If
you want, make a mnemonic device for the order of sharps, or simply
reverse the order of flats.

In the following key signature, which uses all the sharps, notice the order
and the placement of the sharps.



Example 22.3 Key signatures in bass and treble clef with all seven sharps.

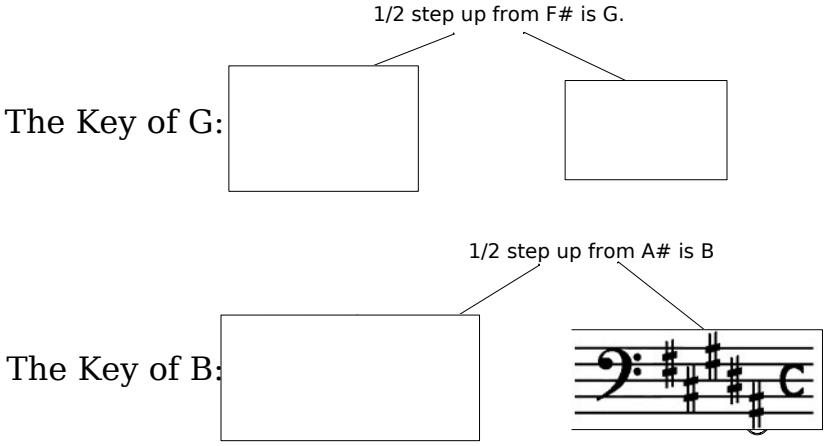
Find the Name of a Sharp Key

Finding the name of a key with sharps in it is much less involved than
finding a flat key.

That very last sharp in a sharp key signature is the one responsible for

making the half step from the seventh to the eighth degree of the major
scale. Simply go up half a step from that last sharp and you have the
name of the key.

Example 22.4 The keys of G and B.



Construct a Sharp Key

If you reverse the process, you can construct a sharp key. Again, three easy steps.

1 Take the name of the key you want and go to the sharp note a half step below the key note. For example, if you want to find the key of D, go down a half step to C#.

2 Find out where that note is in the order of sharps. In our example, C# is the second sharp (F C G D A E B), so there are two sharps in the key of D.

3 Put the sharps in the correct order on the right line or space and you've got it.

The Key of C

This is the only key signature you have to memorize. Because there are

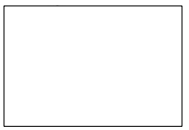
no sharps or flats with this key, there is no quick way to figure out what
the key signature is. But if you know the C major scale, you know that
there are no sharps or flats in the scale. You can see the key of C on the
next page

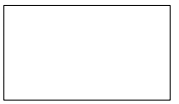
The Keys to the Kingdom

The Key of C:

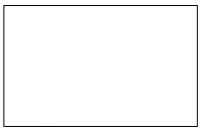
Flat Keys

F

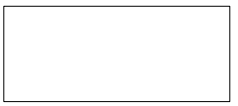




Bb

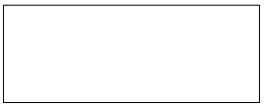


Eb



Ab

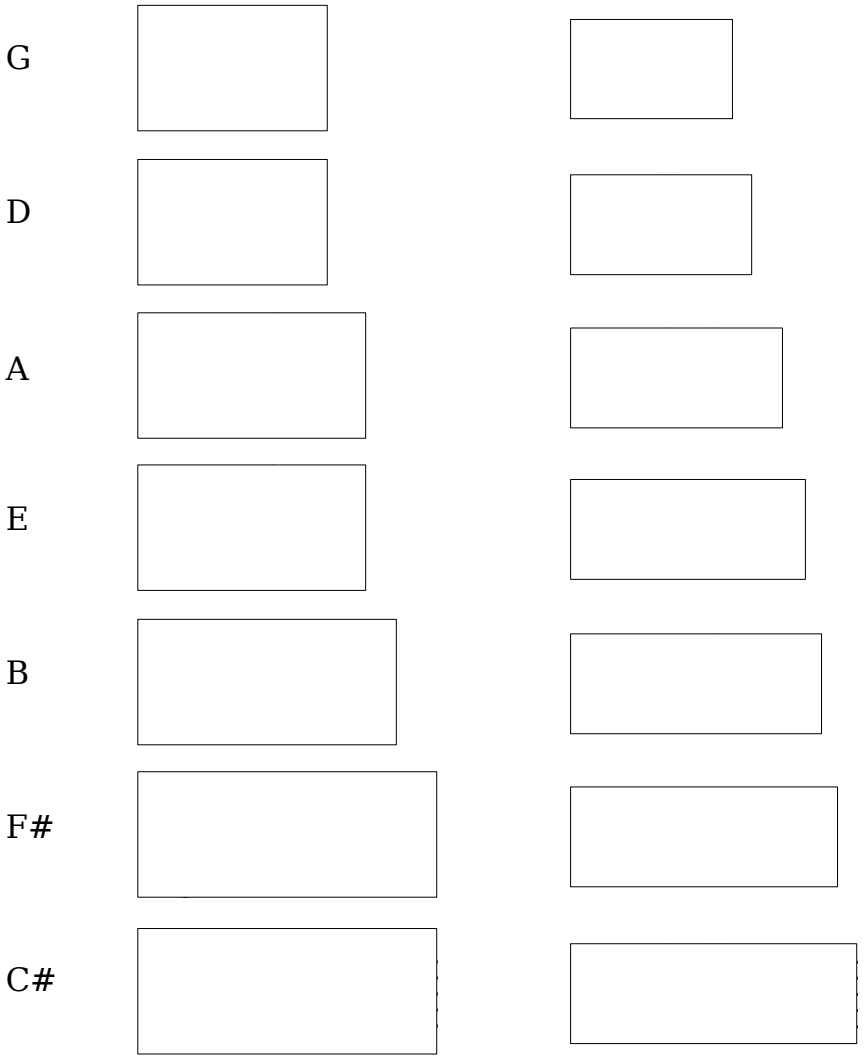
Db



Gb

Cb

Sharp Keys



Moving On

The concept of key signatures can be difficult to understand, but I hope
you've got it. If not, spend some more time with this chapter until you do.
Key signatures are important.

After the review for this chapter is the review for the entire section. This has been an important section, and most of what follows builds on what you've learned in this section, so be sure you understand all of it before moving on.

After the section review, you get to take a break from music theory with another Interlude. In this one you get to learn a little bit about conducting.

Chapter 22 Review

1. How are key signatures and the major scale related?

2. What is the order of flats?

3. How do you find the name of a flat key?

4. Which key has only one flat in it?

5. Which flat is that?

6. Which key has four flats?

7. How many flats in the key of Eb Major, and what are they?

8. How many flats are in the key of C Major?

1. A key signature gives the correct whole and half steps for a major scale of the same name.

2. BEADGCF

3. The second-to-the-last flat in the key signature is the name of the key.

4. F

5. Bb

6. Ab Major

7. Three: Bb,Eb,Ab

8. None

9. Which key has seven flats?

9. Cb Major

10. What is the order of sharps? *10. FCGDAEB*

11. How do you find the name of a sharp key? *11. Go up 1/2 step from the last sharp in the key signature*

12. How many sharps are in the key of D and what are they? *12. Two: F#, C#*

13. What is the name of the key signature with 4 sharps in it? *13. E*

14. How many sharps in the key of C? *14. None*

15. Where do you find key signatures (be specific)? *At the beginning of a piece of music, between the clef and the time signature.*

Practical Use

1. On a low line/space of a blank bass or treble clef staff, write an F. Now put a note on each line and space above the F until you reach the F an octave above (you should end up with 8 notes). Now, just after the clef, put in the key signature for F# Major. Look at the sharp key examples for help with this if you must. Play and sing the F# Major scale you just made (have a fingering chart for your instrument handy).

2. Create a 4-measure melody in the key of Ab. Choose your own clef and meter. Play and sing what you've written. Change it if you don't like it. Do the same in two more keys of your choice.

3. From now on, whenever you see a piece of music, look at it and identify

its key signature.

Part IV Review

Whew! You Made It.

These pages can be used to test your memory on what you've learned in
Part IV, and if some of the information hasn't stuck, you can go back and
check it out on the page indicated below the question.

As with the chapter reviews, use your keyboard to cover up the answers
while you test yourself.

The Review

1. What does an accidental do?
   page 160

   1. Slightly alters the pitch of a note

2. What are the names of the accidentals?
   page 160

   2. Flat, sharp, natural

3. Where are accidentals written?
page 160

3. In front of the note and on the same line or space as the note

4. What does a flat do to a note?
page 161

4. Lowers the pitch by one half step

5. Draw five flats.
page 161

6. Draw five sharps.
page 161

7. What does a sharp do to a note?
page 161

7. Raises the pitch by one half step

8. Draw five naturals.
page 162

9. What does a natural do?
page 162

9. Cancels a sharp or a flat

10. How many notes can accidentals be used with?
page 161, page 161, page 162

10. All of them

11. How long does the effect of an accidental last?
page 162

11. For an entire measure

12. Can an accidental have an effect across a bar line?
page 162

12. No

13. What is the definition of a half step?
page 169

13. The difference in pitch between two adjacent keys on a piano keyboard

14. What is an enharmonic note? Give a couple examples.
page 168

14. A pitch with two different names, like C# and Db, or F# and Gb

15. What is a whole step?
page 169

15. Two half steps

16. What are the two natural half steps?
page 169

16. B-C, E-F

17. Which accidentals are used when going up a chromatic scale?
page 169

17. Sharps

18. Which accidentals are used when coming down a chromatic scale?
page 169

18. Flats

19. What is an octave?
page 175

19. The distance from one letter name to the next letter of the same name. 12 half steps, or 6 whole steps

20. What is the series of whole and half steps for the major scale?
page 174

20. wwhwwwh

21. What is the symbol for a half step?
page 175

21.

22. What is the symbol for a whole step?
page 175

22.

23. Between which degrees of the major scale do the half steps occur?
page 174

23. 3-4, 7-8

24. Use your keyboard to figure out the following scales: A Major, Ab Major, D Major, and Db Major.
page 177

25. How are key signatures and the major scale related?
page 180

25. A key signature gives the correct whole and half steps for a major scale of the same name.

26. What is the order of flats?
page 181

26. BEADGCF

27. How do you find the name of a flat key?
page 181

27. The second-to-the-last flat in the key signature is the name of the key.

28. Which key has only one flat in it?
page 182

28. F

29. Which flat is that?
page 182

29. Bb

30. Which key has four flats?
page 181

30. Ab

31. How many flats in the key of Eb, and what are they?
page 182

31. Three: Bb,Eb,Ab

32. How many flats are in the key of C?
page 181

32. None

33. Which key has seven flats?
page 181

33. Cb

34. What is the order of sharps?
page 183

34. FCGDAEB

35. How do you find the name of a sharp key?
page 183

35. Go up 1/2 step from the last sharp in the key signature.

36. How many sharps are in the key of D and what are they?
page 184

36. Two: F#, C#

37. What is the name of the key signature with 4 sharps in it?
page 183

37. E

38. In a piece of music, where will you find the key signature (be specific)?
page 180

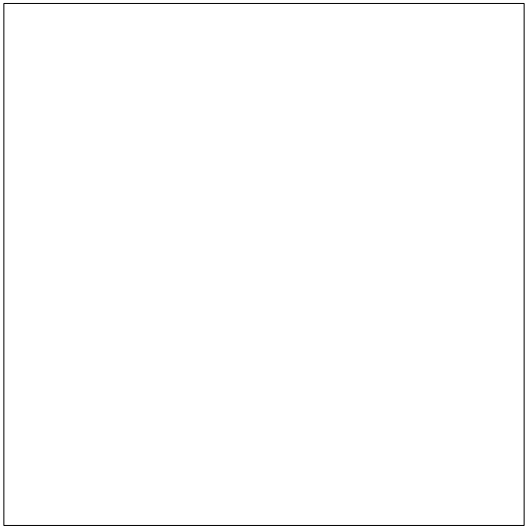
38. At the beginning of a piece of music, between the clef and the time signature

PA RT F I V E

Interval Training

In This Section You Will Learn:

- General Interval Info
- Major and Minor Intervals
- Diminished and Augmented Intervals
- Natural, Harmonic and Melodic Minor Scales
- Modes



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CHAPTER

23

INTERVALS

My idea is that there is music in the air, music all around us; the world is full of it, and you simply take as much as you require.

— Sir Edward Elgar

In This Chapter

- Basic Intervals
- Major and Perfect Intervals
- Minor Intervals
- Diminished Intervals
- Augmented Intervals

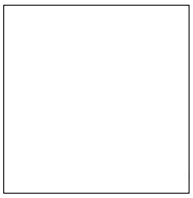
Intervals by the Number

An interval is the distance between two pitches. An interval is expressed as a number from 1 to 13. It is possible to have a number greater than 13, but it's so rare that we'll forget about it.

There are two types of basic intervals, harmonic and melodic.

A harmonic interval is when two notes are sounded simultaneously.

A melodic interval is when two notes are sounded one after the other.



Harmonic Interval

Melodic Interval

When measuring the interval between two notes (both harmonic and melodic), the interval is always measured from the lower note to the higher.

A Simple Way to Find an Interval

To find the number of an interval, simply count every line and space from the bottom note to the top note. Be sure to count the line/space of the bottom note as 1. This is the most common mistake when figuring out an interval. If you don't count the bottom note as 1, you'll end up with the wrong interval.

Example 23.1 The melodic interval of a fifth and a sixth. Notice in the second example that the count starts with the lower note even though it comes after the higher one.

23: Intervals

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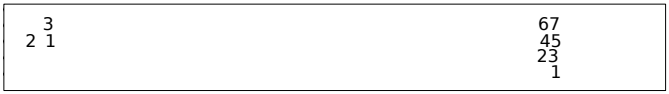
Example 23.2 The harmonic intervals of a third and a seventh.



Interval Quality

In addition to having a number, each interval will also have a quality of
perfect, major, minor, diminished, or augmented.

In order to understand these qualities, we've got to take a look at the
major scale again. We'll use the key of C Major because it's the least
complicated, but these principles can be applied to any key signature.

Perfect Intervals

The Perfect intervals are: Unison (the same note, also called prime),
4ths, 5ths, and octaves (8ths). They're called perfect because their sound
quality, which is a function of their vibration, which is mathematically
elegant. But let's not get into the Golden Mean right now. For excellent
information on this subject, get Hearing and Written Music by Ron
Gorow.

The symbol for a perfect interval is "P". So the intervals, when written
look like so:

PU/PP	perfect unison/perfect prime
P4	perfect fourth
P5	perfect fifth
P8	perfect octave

See example 23.3 on page 200 for the perfect intervals in the C major
scale.

Major Intervals

All other intervals in a major scale are called major intervals. That leaves
us with seconds, thirds, sixths, and sevenths. The letter used for a major
interval is a capital “M”. These intervals would be written like so:

M2	major second
M3	major third
M6	major sixth
M7	major seventh

See example 23.3 below for Major intervals in the key of C major.

It takes two notes to have an interval, so in the example that follows I’ve
put a C below each note, which gives us harmonic intervals up the major
scale. Any of these intervals spread out one after the other would be a
melodic interval.

Example 23.3 Intervals in the key of C Major.

PU/PP M2 M3 P4 P5 M6 M7 P8

Altering Perfect Intervals

A perfect interval can be raised or lowered, and this changes the quality
of the interval.

A perfect interval lowered a half step becomes a diminished interval.

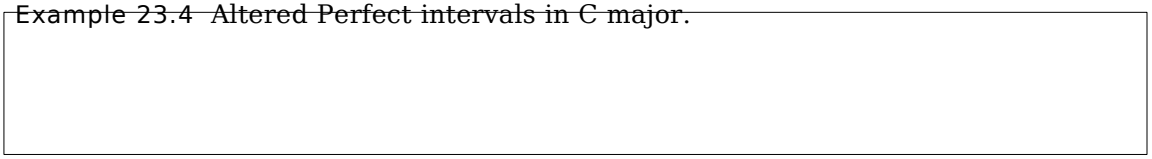
A perfect interval raised a half step becomes an augmented interval.

Here’s a little diagram to help remember this. The aug is above the P
because an augmented interval is higher than a Perfect interval. The dim

is below the P because a diminished interval is lower than a Perfect
interval.

aug
P
dim

Example 23.4 Altered Perfect intervals in C major.



dimU augU dim4 aug4 dim5 aug5

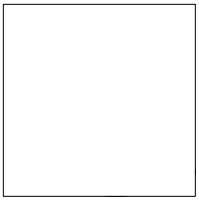
dim8 aug8

Altering Major Intervals

Major intervals can also be altered by raising or lowering them.

A Major interval lowered a half step becomes a minor interval.

A Major interval raised a half step becomes an augmented interval.



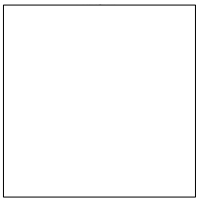
Here's another little diagram. Just like before, the aug is above because
it's higher than the Major, and the min is below because it's a lower than
the Major:

aug
M
min

Example 23.5 Altered Major intervals in the key of C.

min2 aug2 min3 aug3 min6 aug6

min7 aug7



And just to mess with your mind a little, a minor interval lowered a half
step becomes a diminished interval.

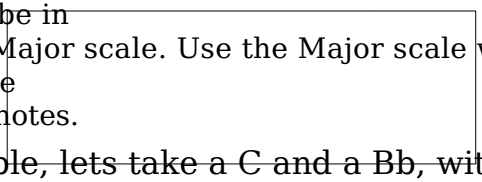
Finding an Interval

In a few easy steps you can find an interval. It's easiest with the key of C
so we'll stick with that for now, but you should be able to find an interval
from any note to any other note.

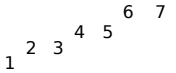
1 Count the lines and spaces up from the lower of the two notes. Be sure
to count the lowest note as 1.

2 Determine if the number of the interval is Major or Perfect. (M = 2, 3, 6,
7; P = U, 4, 5, 8).

3 Determine if the interval is lowered or raised from what it would be in
the Major scale. Use the Major scale which starts on the lower of the
two notes.



For example, lets take a C and a Bb, with C being the lower of the two
notes. For the first step, we count the lines and spaces to get the number
of the interval.



23: Intervals

For step 2, we need to know if a 7th is a Perfect or Major interval. It's a
Major interval if unaltered. But this one is altered, so….

For step 3 we determine that the 7th has been lowered a half step, which
would make it a minor 7th.

Finding Intervals in Keys Other than C

The best way to find intervals in other keys is to have all the Major scales
memorized. There are only 12 of them, so it shouldn't take too long.
Because I'm originally a trumpet player, I still figure out intervals by
running up the major scales with trumpet fingerings. It's sort of like
counting on your fingers. Very handy.

Another way is to memorize how many whole and half steps are in each
interval. This takes a lot of brain space, but it's possible. Here's a little
table with the number of whole and half steps for each interval.

Interval	Number of steps
dimU	-1/2
PU	0
augU	1/2
min2	1/2
M2	1
a2	1 1/2
min3	1 1/2
M3	2
a3	2 1/2
dim4	2
P4	2 1/2
a4	3

dim5	3
P5	3 1/2
a5	4
min6	4

Interval	Number of steps
M6	4 1/2
a6	5
min7	5
M7	5 1/2
a7	6
dim8	5 1/2
P8	6
a8	6 1/2

A Brief Note on Ear Training

Knowing these intervals intellectually is valuable, but knowing them by hearing them is priceless. If you've ever struggled with learning a song by ear, you'll appreciate knowing intervals by the way they sound.

The trick is to sing or play each interval over and over and over until you can sing any interval from any note. There are many ways to do this. One way is to pick an interval a week and sing/play that interval from every note you can sing/play until you've memorized the difference in pitch.

Do this everywhere you won't be looked at strangely (or if you don't mind looking strange, do it everywhere): in the car, in the shower, hum them under your breath at a boring lecture or meeting, use your imagination. Knowing these intervals by ear is a valuable skill for any musician of any level. If you can hear an interval correctly, writing it out is a cinch.

Moving On

It may take some time living with these intervals before they really stick in your head. Keep at it until you've got them. Knowing your intervals will be necessary when we get to building chords, which is coming up in a few chapters.

Coming up in the next chapter are minor scales.

Chapter 23 Review

1. What is the definition of an interval?

2. What is a harmonic interval?

3. What is a melodic interval?

4. How do you find the number of an interval?

5. What will always be the number of the lower note?

6. What are the qualities of intervals?

7. What does a Perfect interval become when lowered a half step?

8. What does a Perfect interval become when raised a half step? *(aug)*

9. What does a Major interval become when raised a half step?

10. What does a Major interval become when lowered a half step?

1. The distance between two pitches

2. The distance between two pitches sounded simultaneously

3. The distance between two pitches sounded consecutively

4. Count each line and space up from the lower of the two notes

5. 1

6. Perfect, Major, minor, diminished, augmented

7. diminished (dim)

8. augmented (aug)

9. augmented (aug)

10. minor

11. What is this interval?

11. min 6

12. What is this interval?

12. aug 4

Practical Use

1. Draw a whole note C on the treble clef (any octave is fine). Draw another note a fifth above the C. What is the name of the note a fifth above C? Sing or play the interval of a fifth until you can do it from any pitch (this may take some time...keep at it).

2. On the first three lines and two spaces of the treble staff, draw whole notes on E, F, G, and A. Next you'll make a harmonic interval (one note directly over another) above each note you've already written. Write in the note an octave above the E, F, G, and the A. What are the names of these notes an octave above? Now, in between the note and the octave, write in a fifth. Play and sing these intervals.

3. On a piece of music you are currently studying, identify at least two intervals. Sing and play the interval out of the context of the piece. When you play the piece from now on, try to be aware of the sound of the intervals you've chosen. When you can identify them by their sound, pick a couple more and repeat the process.

CHAPTER

24

MINOR SCALES

A painter paints pictures on canvas, but a musician paints pictures on silence.

— Leopold Stokowski

In This Chapter

- General Minor Scale Information
- Natural Minor Scales
- Parallel and Relative Minor
- Harmonic Minor Scales
- Melodic Minor Scales

General Minor Scale Info

If you hear music which evokes a feeling of sadness or melancholy, you can bet it's in a minor key.

This change in emotion is brought about by lowering a few degrees of the major scale by half a step.

There are three types of minor scale: natural minor, harmonic minor, and melodic minor. Just like the Major scale, each minor scale has a different scheme of whole and half steps.

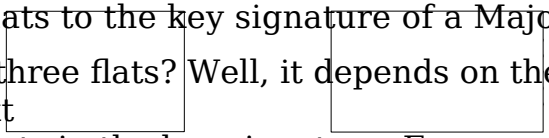
The good news is that you don't have to memorize those schemes, we'll just alter the Major scale to get the minor scales.

Even better news is that the only minor scale that gets a lot of use is the harmonic minor scale. But the others are important too, especially the natural minor.

The Natural Minor Scale

It's easy to get a key signature for a natural minor scale: simply add three flats to the key signature of a Major scale.

Which three flats? Well, it depends on the major scale. You add the next three flats in the key signature. For example, the key of F Major has one flat, a Bb. If we wanted to get F minor, we'd add the next three flats in the order of flats, which are Eb, Ab, and Db.

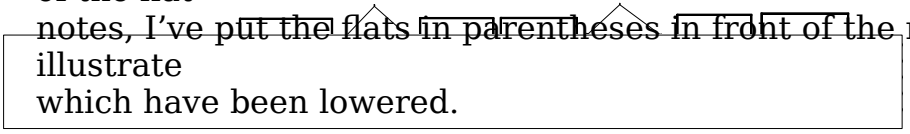


Example 24.1 The key signatures of F Major and f minor.

F Major f minor

I’m sure you’re saying, “But wait a minute, that’s also the key of Ab
Major, isn’t it?” Yes it is. What’s different is the starting note of the
scale.

In this case, we'll be starting on F, so the key signature of f minor will
give us a specific series of whole and half steps from F to F with the key
signature of 4 flats. In example 24.2 you'll see that adding the next three
flats in the key signature will lower the 3rd, 6th, and 7th degrees of the
major scale by half a step. Though the key signature takes care of the flat
notes, I've put the flats in parentheses in front of the notes to illustrate
which have been lowered.



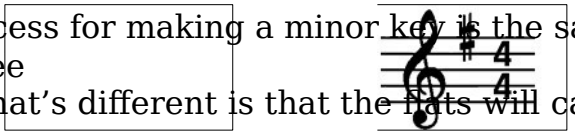
Example 24.2 The f minor scale with whole and half steps shown.

1 2 3 4 5 6 7 8

With this example, you can see the series of whole and half steps for any
natural minor scale is: whole, half, whole, whole, half, whole, whole
(whwwhww). Memorize this if you want, but it's easier to simply add
three flats to the major key of the starting note.

What About Sharp Keys?

The process for making a minor key is the same for sharp keys. Add three
flats. What's different is that the flats will cancel out the sharps.



For example, if we take the key of E with 4 sharps and add 3 flats, those
three flats cancel out three of the sharps, leaving us with one sharp, which
is the key of e minor.

Example 24.3 The keys of E Major and e minor.

E Major e minor

You’ll notice that the key of e minor is the same as the key of G, but what
is different is the starting note, which will of course be E. I’m not going

to write it out but I guarantee that if you checked the whole and half step
pattern from e to e with one sharp, it'll also be whwwhww.

If you have a sharp key with only one or two sharps (keys of G and D
Major), adding three flats will cancel out the sharps and you'll be left
with two or one flat, respectively (keys of g and d minor).

How Do You Tell the Difference?

You may be wondering that a key signature can be either Major or minor
(as in the example above: e minor, or G Major). There is an easy way to
tell. Your first signal should be the beginning and ending note, especially
the ending one. It is almost always the tonic, or the note which gives the
key its name. For example, in a song with one sharp, if it's in G Major,
the last note (and likely the first note, too) will be G. If the piece is in e
minor, the last note (and likely the first note, too) will be e. If you
actually hear the song, you can tell by the way it sounds: sad is minor,
happy is Major.

Parallel and Relative Minor Scales

You may hear the above terms. They aren't different types of minor
scales but are different ways of finding out which notes to play in the
minor scale.

Parallel Minor

The way you have just learned—adding 3 flats to the key—is how to
find the parallel minor scale. It's called parallel because it begins on

the same note as the Major scale equivalent.

Relative Minor

I pointed out above that a minor key signature can also be a major key
signature, but what makes it minor is the starting note.

Take a look at example 24.3 above, the key signatures for E Major and
e minor. The key of e minor has only one sharp, right? This is also the
key signature for G Major. These two keys are related (hence the term
“relative minor”). The key signatures are exactly the same, but the
difference is the starting note.

If you go up the G Major scale, what is the 6th note? I'll wait while
you figure it out ....

It's E, isn't it? Play or sing a scale with the key of G, but play it from E
to E and you've got the E natural minor scale.

If you take any major scale and play it from the sixth note to the next
sixth note an octave higher, you'll have played the relative minor scale
of the major key.

So e minor is the relative minor of G Major; A minor is the relative
minor of C Major; G minor is the relative minor of Bb Major; B minor
is the relative minor of D Major; and so on.

The cool thing about this is that when learning natural minor scales,
you don't really have to memorize a whole new set of scales, simply
start on the sixth degree of the Major scale, play the notes of that major
scale from the 6th degree to the 6th an octave higher, and you've got a
natural minor scale.

The Harmonic Minor Scale

This is the minor scale which gets the most use. The harmonic minor
scale is a slightly altered natural minor scale. The seventh degree is
raised one half step.

The harmonic minor scale gets its name from how it's used. The
harmonic minor scale is used in order to get the harmony correct when
using chords.

When constructing chords (which are harmony—two or more notes at

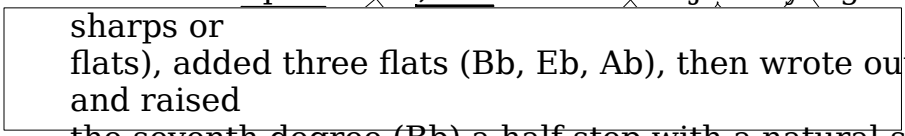
once), in order for the chord progressions to sound right to our ears, we
need a half step between the 7th and 8th degree of the scale, and that's
what the harmonic minor scale does.

This seventh degree, when it's a half step away from the tonic, is called a
leading tone. It's called a leading tone because it leads our ear to the
tonic. Try this: play a major scale and stop on the seventh degree. It feels
unresolved, unfinished, and leaves us slightly unsettled.

If you remember, in the natural minor scale, there is a whole step between the 7th and 8th degrees of the scale. To change this to a half step, you must raise the 7th degree a half step.

You find the key signature of a harmonic minor scale exactly the same way as a natural minor scale: add three flats to the Major key signature of the starting note, then simply raise the seventh degree one half step.

In the example below, I took the C Major key signature (no sharps or flats), added three flats (Bb, Eb, Ab), then wrote out the scale and raised the seventh degree (Bb) a half step with a natural sign.



Example 24.4 The C harmonic minor scale.

There is no key signature for the harmonic minor scale, so you have to alter the 7th degree in order to get the scale. If you tried to alter the key signature to do this, you'd have to take out the first flat, the Bb. You can't take it out without also taking out the others because the order of flats must always remain the same. It isn't just a good idea, it's the law.

Notice that between the 6th and 7th degree of this scale we have 1 1/2 steps. This is part of what gives the harmonic minor scale its distinctive sound.

Play the scale in example 24.4 above. Many people think it sounds

“Arabian” or “exotic”. It’s a cool sound, and if you’re memorizing
scales, after you get your majors down, start with the harmonic minors.

The Melodic Minor Scale

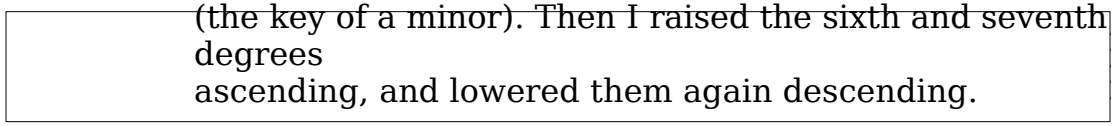
This is an oddball scale, one which you’ll rarely see, and rarely use, but
here it is.

The melodic minor scale is also based on the natural minor key signature
with some alterations to the notes in the scale, but not to the key signature
itself.

One weird thing about this scale is that it's different going up than it is coming down.

On the way up, the 6th and 7th degrees of the natural minor scale are raised a half step, and on the way down they're lowered again. Pretty strange, isn't it?

In the example, I took the A Major scale (3 sharps), added three flats (they cancel the sharps) and got a key signature with no sharps or flats (the key of a minor). Then I raised the sixth and seventh degrees ascending, and lowered them again descending.



Example 24.5 The a melodic minor scale.

Moving On

The information in this chapter can be confusing, and many students find it a little challenging to wrap their brain around these concepts, so don't be surprised if you have to go back through it several times before it makes sense. Keep at it.

Coming up in the next chapter are modes, two of which you already know: the Major and minor scale.

Chapter 24 Review

1. What are the three types of minor scale?

1. Natural, harmonic, melodic

2. How do you make a natural minor scale?

3. Which notes of the major scale are lowered to make the natural minor scale?

2. Add 3 flats to the key signature of a Major scale and use the same starting note

3. 3rd, 6th, 7th

4. The key of D Major has 2 sharps (F# and C#). What is the key of d minor?

4. One flat (Bb)

5. How do you make a harmonic minor scale?

5. Raise the 7th degree of the natural minor scale a half step

6. What is a leading tone?

6. One half step between the 7th and 8th degree of a scale

7. Do Major scales have leading tones?

7. Yes

8. Can you alter the natural minor key signature to get a key signature for the harmonic minor scale?

8. No

9. How is a melodic minor scale different from the natural minor scale?

9. 6th and 7th degrees are raised a half step going up; lowered again going down

10. What's the difference between a parallel minor scale and a relative minor scale?

10. Parallel minor scales start on the same note as the major but the key signature has 3 extra flats. Relative minor scales begin on the 6th note of a Major scale and have the same key signature.

Practical Use

1. Write out harmonic minor scale starting on the following notes: C, B-flat, D, and F. Play them and sing them until memorized. Learn all 12 harmonic minor scales (keep at it no matter how long it takes!).

2. Write out all the key signatures and identify the major and minor for at least three of them. Example: 1 sharp is G Major, and e minor.

3. Persistence is the mother of success. Repetition is the father of success. Keep at it!

CHAPTER 25

SCALES A LA MODE

Musical innovation is full of danger to the State, for when modes of music change, the laws of the State always change with them.

— Plato, The Republic

In This Chapter

- What is a Mode?
- Ionic Mode
- Dorian Mode
- Phrygian Mode
- Lydian Mode
- Mixolydian Mode
- Aeolian Mode
- Locrian Mode

What is a Mode?

A mode is a type of scale. Modes are used in certain types of music, like salsa, jazz, country, rock, fusion, speed metal, and more. To find out the details, read on.

The reason the Theory Geek appears on the title page of this chapter is that this information isn't crucial to understanding music theory, but it does come in handy for things like improvisation in different styles of music.

These are also called "church modes" because they were first used in the Catholic Church back in Medieval times (remember good old Guido d' Arezzo?). The names of the modes were taken from the Greek modes, but other than the names, they have no relation to the Greek modes.

The two modes which have been used the most, and the only two most people know, are now called the Major and natural minor scales. Their original names were the Ionian mode (Major), and the Aeolian mode (minor). The other modes are: dorian, phrygian, lydian, mixolydian, and locrian.

Modes are easy to understand. We'll map out each mode's series of whole and half steps and use the key of C so there aren't any sharps or flats to bother with.

The Modes

Ionian

As you already know, the Ionian mode is the same as the C Major scale.
All the white keys on the piano from C to C. And I’m sure you remember
the whole-half step pattern of WWHWWWH

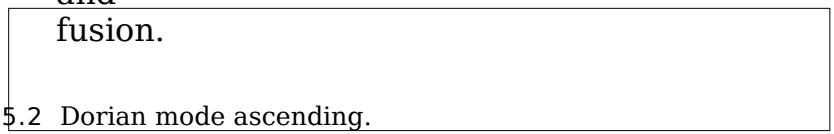
Ionian is used in nearly all Western music, from Classical to Hip-hop.

Example 25.1 The Ionian mode, also known as the Major scale.

Dorian

The Dorian mode begins on the second degree of the Major scale and in the key of C goes from D to D on the white keys of the piano. The pattern of whole and half steps is WHWWWHW.

There are 12 Dorian scales, corresponding to the 12 key signatures. The Dorian mode is a minor-sounding scale used in rock, jazz, blues, and fusion.

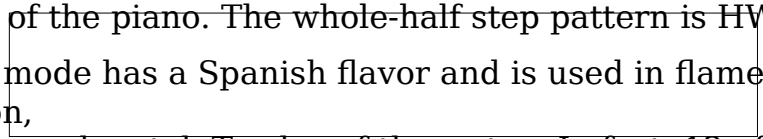


Example 25.2 Dorian mode ascending.

Phrygian

You've probably caught on to the pattern by now. Phrygian begins on the third degree of the Major scale and in the key of C is E to E on the white keys of the piano. The whole-half step pattern is HWWWHWW.

This mode has a Spanish flavor and is used in flamenco music, fusion, and speed metal. Twelve of these, too. In fact, 12 of all of them.



Example 25.3 Phrygian mode ascending.

Lydian

Lydian begins on the 4th degree of the Major scale and in the key of C is
from F to F on the white keys of the piano. Whole-half step pattern is
WWWHWWH.

You might see this mode in jazz, fusion, rock, or country music.

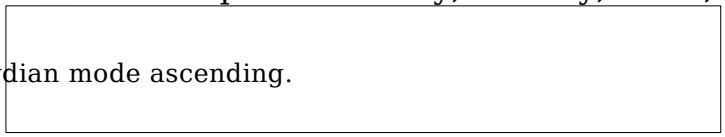
Example 25.4 Lydian mode ascending.

Mixolydian

Mixolydian begins on the fifth degree of the Major scale, and in the key
of C is G to G on the white keys. Whole-half step pattern is
WWHWWHW.

This mode shows up in rockabilly, country, blues, and rock.

Example 25.5 Mixolydian mode ascending.



Aeolian

Also known as the natural minor scale, the aeolian mode begins on the
sixth degree of the Major scale. In the key of C it’s from A to A on the
white keys. WHWWHWW.

This mode appears in all kinds of music: pop, country, Rock, blues,
heavy metal, classical, and on and on.

Example 25.6 Aeolian mode ascending.

Locrian

This is the strangest sounding mode, and the least used, though you'll
probably find it in some fusion and in jazz.

The locrian mode begins on the seventh degree of the Major scale, and is
B to B in the key of C.

Example 25.7 Locrian mode ascending.

Finding Modes in Other Keys

There are two ways to find a mode in another key. You can find a mode
within a certain key signature, or find a mode starting on a specific note.

To find a mode in a certain key is easiest. Just a couple steps.

1 Play the Major scale in the key you'll be using. For an example, let's
say you wanted to find the Dorian mode which uses the key of Ab. First
step is to play the Ab Major scale.

2 Depending on what mode you want, start on the appropriate note in the
Major scale, and play an octave in the key of the Major scale. For our
example, you want the Dorian mode, which begins on the second
degree of the Major scale. So you'd play from Bb to Bb using the key of

Ab. Or think of D Dorian as D Major with a flatted third and a flatted
seventh.

To find a mode beginning on a specific note, the process is a little
different but still pretty simple.

1 Depending on the mode you want, find out which major scale has that
note in the appropriate place. Let’s stick with Dorian for an example.

You want to find the Dorian mode which begins on F. So you'd find out
which Major scale has F as its second note. The answer is Eb.

2 Then use the key signature you found in step 1 for the Dorian mode. In
our example, you'd play F to F using the key of Eb.

Moving On

Again, modes aren't particularly necessary to understand music theory,
but can be useful. Now we get to move on to the blues scales, which are
fun and sound cool.

Chapter 25 Review

1. What are the names of the modes?

1. Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, Locrian

2. Which mode is the same as the major scale?

2. Ionian

3. Which mode is the same as the natural minor scale?

3. Aeolian

4. What is the starting note for the Dorian mode which uses the key of D Major?

4. E

5. What key signature would be used for the Dorian mode beginning on an A?

5. Key of G. One sharp

Practical Use

1. Write out all of the modes in the key of C. Learn them on your instrument/voice.
Know where the half steps are in each. Then learn all of the modes in the key of F, then

G, etc. Keep adding a sharp or flat each time. Another option is to learn only one mode at
a time in every key, for example, the D Ionian, D Dorian, D Phrygian, etc.

CHAPTER

26

BLUES TO BEBOP AND BEYOND

Jazz isn't dead, it just smells funny.

— Frank Zappa

In This Chapter

- General Blues Scale Information
- The Blues Scale
- 12 Bar Blues
- Other Crazy Scales

General Blues Scale Info

Most people like blues scales. They sound cool, are fun to play and easy to learn. They also come in handy if you're improvising in blues, rock and roll, country, jazz, and many other styles of music.

Just like all the other scales, the blues scale can be made by altering notes of the major scale.

These altered notes are called blue notes, and their use originated with Africans who were brought to this country as slaves. A blue note was originally a bending of the pitch with the voice.

It's thought that the use of "the blues" as a term for feeling down came from a Native American tribe in the south who would cover their bodies with a blue dye when they were in mourning. Slaves in the area saw the practice and invented the term "feeling blue." Maybe it's just legend, but it's a story I like.

The Blues Scale

Standard Blues Scale

The standard blues scale is also called the minor blues scale.

As usual, we'll start with the key of C to avoid the confusion of lots of accidentals.

The 3rd, 5th and 7th degrees are lowered a half step, but the P5th is also needed so we'll have to slap a natural on the G to get that one in.

Example 26.1 C blues scale.

26: Blues To Bebop and Beyond

Recipe for Any Standard Blues Scale

1 Take one Major scale of your choice

2 Use the tonic of the Major scale as the first note of the blues scale.

3 Lower the third degree of the Major scale a half step to get the second
degree of the blues scale.

4 Use the P4 of the Major scale as the 3rd note of the blues scale.

5 Lower the P5 by a half step to get the 4th note of the blues scale.

6 Put the needed accidental in front of the 5th to get a P5 for the 5th note
of the blues scale.

7 Take the seventh degree of the Major scale and lower it a half step for
the 6th degree of the blues scale.

8 Use the P8 for the seventh note of the blues scale.

9 Turn lightly over and over in your brain and under your fingers until
memorized.

10 Repeat from step one with a new scale until all 12 are memorized.

The Major Blues Scale

The Major blues scale is a slight alteration of the standard blues scale.
See if you can spot the difference. There is a M2, a M3, and a M6, but no
P4, and no m7.

Example 26.2 The C Major blues scale.

If you were talking to a “jazzer”, and asked her what the Major blues
scale was, she’d say, “Tonic, two, flat three, three, five, six, eight,” or

something similar. This a shorthand version of describing each degree of
the Major blues scale as it relates to the Major scale.

Other Crazy Scales

In this little section I'll show you: bebop scales, pentatonic scales, whole tone scales, and the super-locrian scale.

I'll only give you the version of each scale starting on C, and from there you can figure out the rest. If you're really gung-ho, you can take a look at www.QuestionsInk.com/student, where you'll find a link for "Scales Galore". Go there and be amazed.

Pentatonic Scales

This is a type of gapped scale, which means a regular scale with some notes missing. In this case, we take out the 4th and 7th degrees of the major scale.

The pentatonic scale is another scale used a lot in jazz improvisation. As the name implies, there are only 5 notes in this scale. Though you see six, the bottom and top notes (tonic) count as one because they have the same name.

Example 26.3 C Major pentatonic scale.

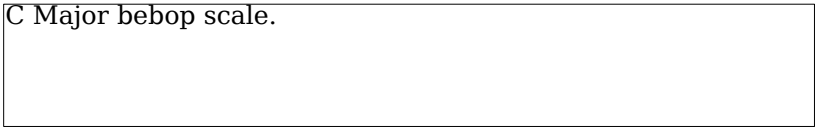
Example 26.4 C minor pentatonic scale.

Bebop Scales

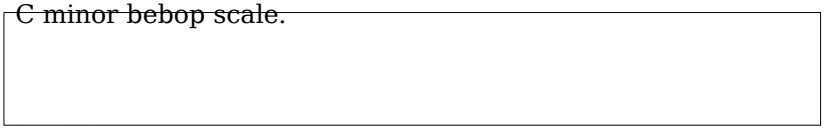
Bebop is a form of jazz begun by Dizzy Gillespie and Charlie “Bird”
Parker. It features blinding speed and virtuosic improvisational solos.
Some great bebop performers include Dizzy and Bird, Miles Davis, Stan
Getz, Sonny Rollins, Sonny Stitt, and that’s only a few.

There are three types of bebop scales: Major bebop, minor bebop, and
dominant bebop.

Example 26.5 C Major bebop scale.



Example 26.6 C minor bebop scale.



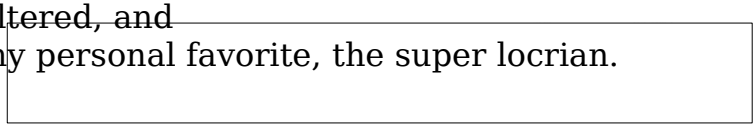
Example 26.7 C dominant bebop scale.

Whole Tone Scale and the Super Locrian

Here are a couple of the strangest sounding scales you'll ever hear. The
whole tone scale consists entirely of whole tones (whole steps), no half
steps allowed.

The second scale has several names: diminished whole tone, altered, and
my personal favorite, the super locrian.

Example 26.8 C whole tone scale.



Example 26.9 The Super Locrian scale (aka: diminished whole tone; altered).

Moving On

Now that you've gotten a taste of several other scales that are out there,
you can never say, "But there's nothing to practice."

Coming up is the chapter review, then the hefty Section review. After
that it's on to the next Part, which is all about chords: what they are, how
to build them, chord extensions, and basic chord progressions.

Chapter 26 Review

1. What is a blue note?

1. An altered note (usu. lowered) of the major scale

2. As compared to the major scale, what are the notes of a standard blues scale?

2. Tonic, flat 3, 4, flat 5, natural 5, flat 7,

8.

3. What is a gapped scale?

3. A scale with some notes removed.

4. Name at least three other types of scales.

4. Super Locrian, Major pentatonic, minor pentatonic, Major bebop, minor bebop, dominant bebop, whole tone.

Practical Use

1. Write out the C, F, and G blues scales. Memorize them on your instrument. Sing them. Improvise melodies and sounds with these three scales.

How to Sing the Blues (Not Really)

1. Most blues begin with “woke up this mornin.”
2. “I got a good woman” is a bad way to begin the blues unless you stick something nasty in the next line: “I got a good woman, with the meanest dog in town…”
3. Blues are simple. After you’ve got the first line, repeat it. Then find something that sort of rhymes:

    Got a good woman with the meanest dog in town,
    Got a good woman with the meanest dog in town,
    He gots teeth like Mick Jagger
    And he weigh 500 pounds.

4. The blues aren’t about limitless choice.
5. Blues cars are Chevys and Cadillacs. Other acceptable blues transportation: a Greyhound bus or a southbound train. Not acceptable:
   BMW, hot air balloons, an R.V.
6. Walkin’ always plays a major part in the blues, as does fixin’ to die.
7. The best places to get the blues are Chicago, St. Louis, and Kansas City.
8. The following colors don’t belong in the blues: beige, mauve, violet, periwinkle.
9. You can’t have the blues in an office or mall. The lighting is wrong.
10. Good places for the blues: the highway (crossroads are best), the jail house, an empty bed.
11. Bad places for the blues: an ashram, gallery openings, wine tastings.
12. No one will believe it’s the blues if you wear a suit unless you’re an old African-American man.
13. Do you have a right to sing the blues?

    Yes if:
    your first name is a state, like Georgia;
    you’re blind;
    you shot a man in Memphis;

you can’t be satisfied;
“the man” doesn’t like you.
No if:
you were once blind but now can see;
you ski in Tahoe each year
you have an IRA.

14. If you ask for water and yo’ baby gives you gasoline, it’s the blues.

15. Other blues liquids:
    wine from a bottle in a sack;
    Irish whiskey from a dirty glass;
    muddy water (usually not for drinking).

16. Not blues beverages:
    any mixed drink, or drink with an umbrella in it;
    any kosher wine;
    Yoo Hoo (all flavors).

17. If it occurs in a fleabag motel or in a shotgun shack, it's a blues death.
    Other blues deaths: being stabbed in the back by a jealous lover,
    being pushed down an old mine shaft, crying yourself to death. You
    cannot die a blues death during a tennis match or during a liposuction
    treatment.
18. Some blues names for women:
    Sadie
    Big Mama
    Bessie
    Billie

19. Some blues names for men:
    Joe (including "Big", "Old", or "Blind" in any combination, but not Little
    Willie (Little Willie could work)
    Lightnin'
    Almost anything with Howlin' in front of it
    Other possibilities include physical infirmities: Blind, Cripple, Wheezin'
    Fruit names: lemon, lime, (not pomegranate)
    Presidents: Jefferson, Johnson, Fillmore, (not Bush)

20. Persons with names like Sierra, Sequoia, or Chauncey will not be per-
    mitted to sing the blues no matter how many men they kill in Mem-
    phis.

Part V Review

Whew! You Made It.

These pages can be used to test your memory about what you've learned in Part V, and if some of the information hasn't stuck, you can go back and check it out on the page indicated below the question.

As with the chapter reviews, use your keyboard to cover up the answers while you test yourself.

The Review

1. What is the definition of an interval?
   page 198

   1. The distance between two pitches

2. What is a harmonic interval?
   page 198

   2. The distance between two pitches sounded simultaneously

3. What is a melodic interval?
   page 198

   3. The distance between two pitches sounded consecutively

4. How do you find the number of an interval?
page 198

4. Count each line and space up from the lower of the two notes

5. When figuring an interval, what will always be the number of the lower note?
page 198

5. 1

6. What are the qualities of intervals?
page 199

6. Perfect, Major, minor, diminished, augmented

7. What does a Perfect interval become when lowered a half step?
page 200

7. diminished (dim)

8. What does a Perfect interval become when raised a half step?
page 200

8. augmented (aug)

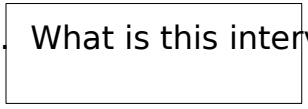
9. What does a Major interval become when raised a half step?
page 201

9. augmented (aug)

10. What does a Major interval become when lowered a half step?
page 201

10. minor

11. What is this interval?



page 200

11. min 6

12. What is this interval?

page 201

12. aug 4

13. What are the three types of minor scale?
page 208

13. natural, harmonic, melodic

14. How do you make a natural minor scale?
page 208

14. Add 3 flats to the key signature of a Major scale and use the same starting note

15. Which notes of the major scale are lowered to make the natural minor scale?
page 208

15. 3rd, 6th, 7th

16. What is the key of B minor?
page 209

16. Two sharps (F#, C#)

17. What is the key of Ab minor?
page 209

17. Seven flats (Bb, Eb, Ab, Db, Gb, Cb, Fb)

18. How do you make a harmonic minor scale?
page 211

18. Raise the 7th degree of the natural minor scale a half step.

19. What is a leading tone?
page 211

19. One half step between the 7th and 8th degree of a scale.

20. Do Major scales have leading tones?
page 211

20. Yes.

21. Can you alter the natural minor key signature to get a key signature for the harmonic minor scale?
page 211

21. No

22. How is a melodic minor scale different from the natural minor scale?
page 212

22. 6th and 7th degrees are raised a half step going up; lowered again going down

23. What's the difference between a parallel minor scale and a relative minor scale?
page 210

23. Parallel minor scales start on the same note as the major but the key signature has 3 extra flats. Relative minor scales begin on the 6th note of a Major scale and have the same key signature.

24. What are the names of the modes?
page 216

24. Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, Locrian

25. Which mode became known as the major scale?
page 216

25. Ionian

26. Which mode became known as the natural minor scale?
page 218

26. Aeolian

27. What is the starting note for the Dorian mode which uses the key of D Major?
page 219

27. E

28. What key signature would be used for the Dorian mode beginning on an A?
page 219

28. Key of G. One sharp

29. What is a blue note?
page 222

29. An altered note (usu. lowered) of the major scale

30. Using the major scale intervals, what are the notes of a standard blues scale?
page 222

30. Tonic, flat 3, 4, flat 5, natural 5, flat 7, 8

31. Name at least three other types of scale.
page 224

31. Super Locrian, Major pentatonic, minor pentatonic, Major bebop, minor bebop, dominant bebop whole tone

CHAPTER 27

Interlude

CONDUCTING

> Conductors must give unmistakable and suggestive signals to the orchestra, not choreography to the audience.
>
> — George Szell

In This Interlude

- General Conducting Info
- Conducting Patterns
- Body Language

General Conducting Information

A conductor is a musician whose instrument is a large group of singers or instrumentalists. These musicians are guided either with a baton (also called a stick) or by the conductor's hands alone.

An audience only sees a very small part of what a conductor does, because all they see is the conductor's back. The audience doesn't get to see the frowns and grimaces, the stern looks and the kind, the oh-so-rare smiles, and all the subtle nuances of body language and facial gesture. The audience sees only the wilder gesticulations of the arms and part of the body language.

Most of a conductor's work in shaping a piece of music comes during rehearsals, though a good conductor with a good group of musicians can shape a piece of music spontaneously during a performance.

A conductor's arm moves in a specific pattern which depends upon the time signature of the piece being played. It's usually the right hand and arm which beat out this pattern while the left hand controls dynamics and phrases and expressiveness. This is only a general rule.

The roles of a conductor change depending upon the level of musician in the group. Let's compare conductors at the two ends of the spectrum: the professional symphony conductor and the elementary school music teacher.

Imagine being responsible for forty students and their knowledge of their

instrument and music, fingerings, posture, embouchure, breathing,
reading music, and how to clean their instrument. These are just a few
things a musician should know. There are thousands of school teachers
who are responsible for teaching this every day of every school year, and
in addition to all that, they conduct these musicians in rehearsals and
concerts. Then of course there is grading, and faculty meetings, and hall
duty, and on and on. We should be in awe of them. If you know one,
thank him or her.

A professional orchestra conductor’s focus is more on his or her aural
vision of the piece, on the subtle nuances of the music. He or she is not
concerned with teaching the clarinets an alternate fingering for low F. A
professional conductor might be interested with a certain passage being

more marcato, a little quieter, and with less trombone. A conductor may however, fire the clarinetist who doesn't know the alternate fingering for low F.

Whatever the level, a conductor is responsible for many more things than the individual musician. First of all, the music a conductor reads is much more complex than the music of any player in the group. This is because the conductor reads from a score, which is a large, multi-paged piece of music with all the parts in it, from the piccolo to the percussion, from the violin to the bass voice parts.

Conductors are also musical scholars, and should know about performance practices (how a certain piece should be performed), about chord structure and chord progressions, about the intonation tendencies of every instrument, about movement and how musicians react to it, about rehearsal technique and how to get what is needed from musicians, about music history and theory, and on and on. A good conductor is always learning.

Stance

How a conductor stands will change based upon the music, and we'll get to some specifics later in the chapter, but generally, a conductor should have good posture, feet about shoulder width apart, and a relaxed stance.

At first, the left arm will simply hang relaxed at your side—you'll use it later, but for now you won't need it. The right arm will be extended,

slightly bent, and will move around in an area a foot or two in front of you, from the top of your head to the middle of your chest, and from shoulder to shoulder.

If you're using a baton (a pencil will work), grip it with the thumb and index finger and wrap the other fingers lightly around it without grasping.

Eye Contact

Probably one of the most important aspects of conducting is eye contact. If a conductor's face is buried in the music, he or she won't be able to look a section of altos or a section of trumpets right in the face to be sure they understand what is being asked for.

Eye contact is a double-edged sword. It won't matter how fiercely the conductor looks at the musicians, or how flamboyantly his or her arms wave if the musicians don't look up from their music. Ever wonder why choirs memorize their music?

Conducting Patterns

The right arm gives each beat in each measure. Each meter has a different pattern for the right arm. The first one you'll learn is the most common pattern, the one for 4/4 time.

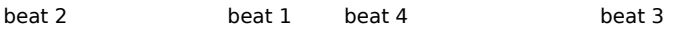
Each diagram that you see is given from the conductor's point of view. You'll get the right movement if you simply trace the pattern in the air.

With all patterns, beat one is always given straight down. Your arm is out in front of you and travels from the level of your head down to the level of your chest.

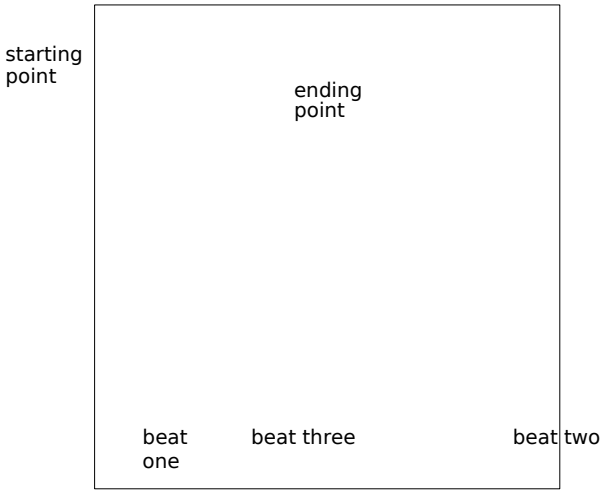
Be sure to make each beat obvious. Do this by giving a small sharp bounce with the hand on each beat.

It takes a little practice to make each pattern look natural, so keep at it. You can learn a lot by watching other conductors, and you might notice that the more accomplished the conductor, the more difficult it will be to determine exactly which pattern he or she is using. Call it creative license.

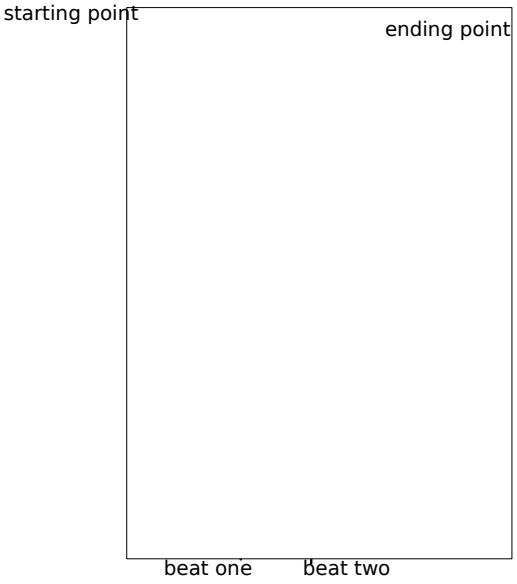
Example 27.1 The conducting pattern for 4/4 time.

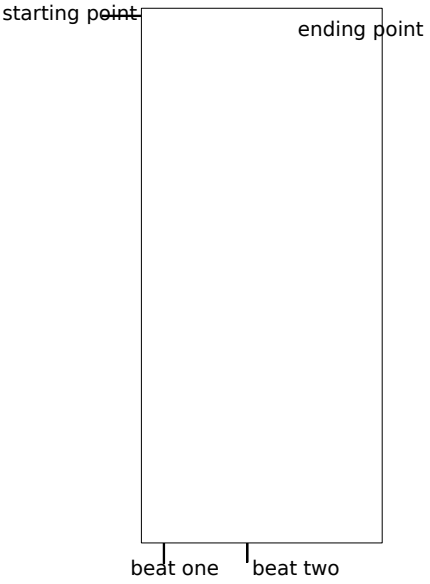

beat 2
beat 1
beat 4
beat 3

Example 27.2 The conducting pattern for 3/4 time.



Example 27.3 Two conducting patterns for 2/4 time.





Showing Style with the Right Hand

Much of the style of a piece of music can be shown with the right hand alone: short, choppy strokes for a piece like a march; long flowing strokes for a more lyric song; a small pattern for quiet sections; a larger pattern for loud sections.

The Left Hand

Though the left hand may also beat out the patterns you just learned, the left normally shows dynamics, articulations, cues (telling instruments or soloists when to come in), and cut-offs.

The independence of each hand takes some effort to master. It's a lot like rubbing your head and patting your stomach at the same time. Try not to beat out the pattern simultaneously with both hands (called mirroring). It's generally considered bad conducting form.

While you're conducting, if you're having trouble getting your left hand to act independently, just let it hang at your side.

Dynamics

There are several ways to show dynamics while conducting: body position, facial expression, and hand position. Let's start with hand position.

Hand Position

If you conduct with a very small pattern (say two square inches in front of you), players—if they're watching you—will play more

quietly. In contrast, very large motions will cause a group to play or
sing more loudly.

To show crescendos (gradually louden), start with the left hand
down near your gut with the palm up and gradually raise it where
the crescendo in the music should happen. By the time your hand
reaches a position above the height of your shoulder, the crescendo
should be at its peak. At the same time, the pattern in the right hand
should start small and grow larger. It’s easier to say than it is to do.
Try it.

Decrescendos (gradually soften) are shown in the opposite way. The
left hand begins above the shoulder, palm down this time, and
gradually lowers down to the middle of your torso. While doing this,
make the right hand pattern become gradually smaller.

If the saxes or the sopranos are too loud, you can “give them the
hand”, which means holding your left hand out with the palm facing
the loud group. This works well accompanied by a stern look.

Body Position

If you step forward on the podium and lean towards the group or
even crouch down, this will cause them to become quieter, especially if you combine these movements with the above-mentioned technique of making the conducting pattern smaller.

Also effective is to show the group a quiet face, whatever you think
that is for you. Pursing your lips in a “shush” works pretty well.
Practice in a mirror.

In contrast, to get a group to play louder, stand tall as you step back
on the podium and lean away from the group. Combine this with
making all of your gestures bigger and a group should get louder if
they’re watching you.

For this technique, use a loud face, usually something that looks
stern or even angry. An upraised fist shaken in the air is also quite
effective.

Practicing Conducting

Perhaps the best way, when you’re just beginning to learn, is to get some
recordings of music you like which require a conductor and, in the
privacy of your own home, give it a try.

The next step, once you’ve got the patterns down, is to get the score for
that piece of music and try to follow along while you conduct.

The best advice I can give you for practicing anything is to be persistent.
Persistence is way more important than talent. Keep at it.

If you’re serious about becoming better, videotaping yourself is a
necessity.

This is only the briefest introduction to the art of conducting. If you'd like to learn more, take a look at the following books:

The Grammar of Conducting: A Comprehensive Guide to Baton Technique and Interpretation by Max Rudolf and Michael Stern.

Preparatory Exercises in Score Reading by Reginald O. Morris and Howard Ferguson.

Conducting Technique for Beginners and Professionals by Brock McElheran and Lukas Foss.

Moving On

Conducting is a discipline much like playing an instrument, and the more you know about it, the better able you'll be to play in a group and follow a conductor, if one is even necessary.

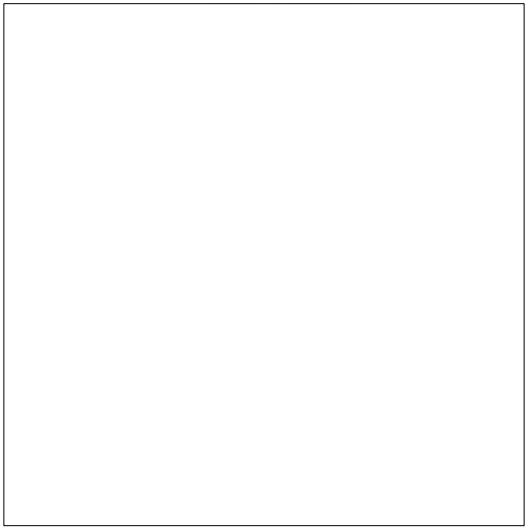
Hope you liked this little break from learning music. Let's jump back into it. Up next are intervals, a way to measure the distance between two notes.

PART SIX

Strike a Chord

In This Section You Will Learn:

- Triads
- Chord Extensions
- Chord Inversions
- Chord Progressions



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CHAPTER

28

TRIADS

Music
Which can be made anywhere, is invisible
And does not smell.

— W.H. Auden

In This Chapter

- General Chord Information
- The Triad
- Major Triad
- Minor Triad
- Diminished Triad
- Augmented Triad

General Chord Info

The use of the word chord began, according to Webster's, around 1608,
and is short for accord, which means to be in harmony, as in agreeing.
It's a good word for a musical chord, because the notes in most chords
tend to agree with each other. They sound good together.

A chord is three or more notes sounded simultaneously. A chord can be
played on one instrument like guitar or piano, or a chord can be played by
many instruments at once, like a woodwind quintet, or a brass quartet, or
a choir. As long as there are three or more notes sounding simultaneously, it's a chord.

There are many types of chords, and many different chord symbols that
tell you which notes to use in a chord. Just like with scales, there are
Major chords, minor chords, but unlike scales, there are also diminished
chords and augmented chords. The quality of a chord is determined by
the intervals within the chord.

There are also other types of chords with more than three notes and
several different treatments of chords, but I'll save those for the next two
chapters.

While you're learning these chords, if you have access to a keyboard, you
really should try playing them to hear what they sound like.

Naming Chords

A chord has two names. One is a number, a Roman numeral. The other
is a letter name. Both the letter name and the Roman numeral have with

them abbreviations or symbols to show the chord qualities of Major,
minor, diminished, and augmented.

Roman Numerals

Each chord has a Roman numeral which corresponds to the degree
of the scale on which the chord is built. Take a look at example 28.2
on page 248 to see this. The upper case Roman numerals denote Major
triads, and lower case denotes minor triads.

In addition, there are other symbols to show diminished and augmented triads. You'll see those soon.

Letter Names

Chords also have a letter name which comes from the root (the bottom note) of the chord. Example 27.1 shows you what a root is.

If a chord is named with only a capital letter, this means the chord is Major. A minor chord will have “min” written next to the letter. Another method for showing minor is to use lower case letters, though it’s more common to use the “min” next to the letter.

In addition, the symbols for augmented and diminished are also used with the letter. We’ll get to diminished and augmented chords in a few more pages.

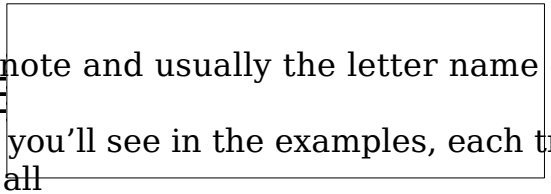
When you say the notes in a chord, you’re spelling the chord. For example, to spell the C chord I’d say, “C, E, G.”

The Triad

A triad consists of three notes stacked in a specific order, a root (or bottom note and usually the letter name of the chord), a third, and a fifth. As you’ll see in the examples, each triad is built on all lines or all spaces.

The parts of a triad get their name from their interval above the root note.

Example 28.1 Triads in various positions on the staff.

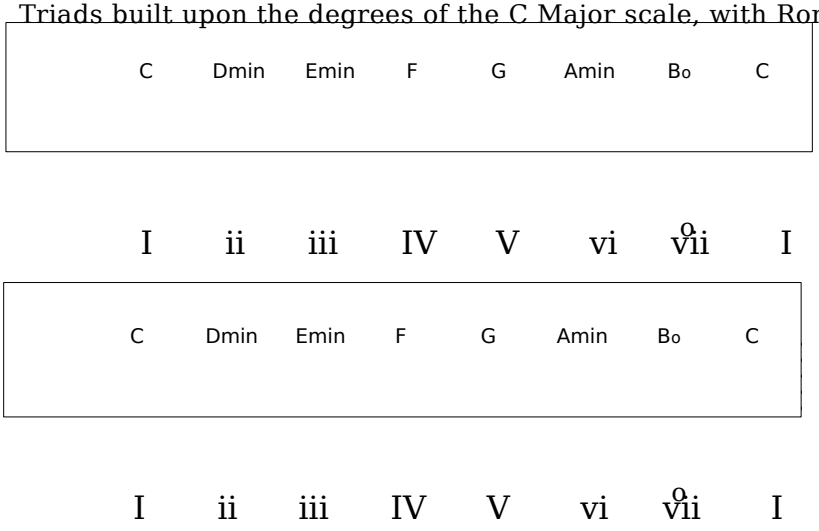


Triads in a Major Key

In the following example, you'll see a triad stacked on each degree of the
C Major scale. Triads stacked in this way will have a quality of either
Major, minor, or diminished (there's only one naturally occurring
diminished chord in a Major scale).

Notice the little circle to the right of the vii. This symbol tells you the
chord is a diminished chord. I'll show you why it's diminished coming
up.

Example 28.2 Triads built upon the degrees of the C Major scale, with Roman numerals.



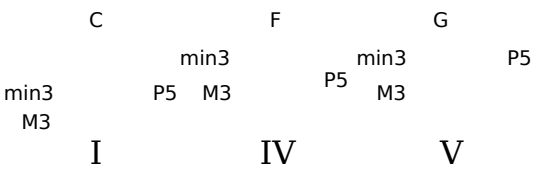
Major Triads

Major triads have a happy, bright sound quality.

A Major triad consists of a note a Major third above the root and
another note a Perfect fifth above the root.

In a Major key, there are three naturally occurring Major triads, those
built upon the first, fourth, and fifth degrees of the scale, or the I, IV, and
V chords.

Example 28.3 Breakdown of the Major triads in the key of C.



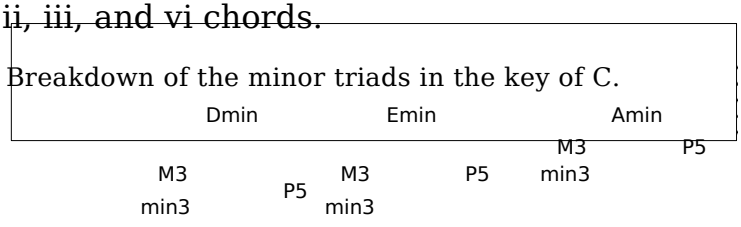
Minor Triads

Minor triads have a dark, sad sound quality.

A minor triad consists of a note a minor 3rd above the root and another
note a Perfect 5th above the root.

In a Major key, there are three naturally occurring minor triads, those
built upon the second, third, and sixth degrees of the Major scale, or the
ii, iii, and vi chords.

Example 28.4 Breakdown of the minor triads in the key of C.



Diminished Triads

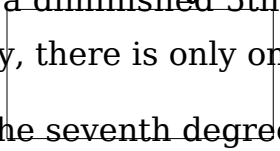
Diminished triads are less common than the Major or minor triads and
have a suspenseful sound quality. This is the chord you hear when the
damsel in distress is tied to the railroad tracks by Dastardly Dan as an
approaching train hoots in the near distance.

A diminished triad consists of a note a minor 3rd above the root and
another note a diminished 5th above the root.

In a Major key, there is only one naturally occurring diminished triad, the
one built on the seventh degree of the Major scale.

Don’t forget to put the little circle next to the lowercase Roman numeral.
We’ll get into more chord symbols in the next chapter.

Example 28.5 Breakdown of the diminished triad on the 7th degree of the Major scale.



min3 dim5
min3

vii

Augmented Triads

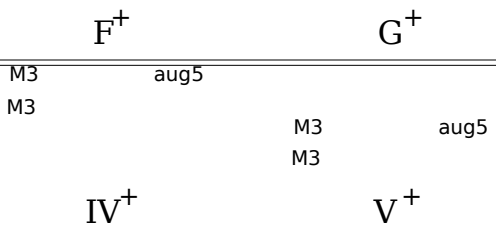
There aren't any naturally occurring augmented triads in the key of C, or in any major key, so we'll have to throw in an accidental to get one. The augmented triad has a vaguely unsettling sound, and is usually the type of chord played just before the knife-wielding psycho jumps out from behind the couch and scares the cooties off your head.

An augmented triad consists of a note a Major 3rd above the root and another note an augmented 5th above the root.

Since there aren't any augmented triads occurring naturally in the key of C, I'll just make a couple up.

The chord symbol for an augmented chord is a plus symbol (+), or the abbreviation "aug."

Example 28.6 Breakdown of two augmented triads in the key of C.



Moving On

Triads are the most basic chord form and it's important to know the difference between Major, minor, diminished and augmented triads, so don't go on until you've got it.

In the next Chapter we'll add another note on top of the chord to make the triad a seventh chord, a type of chord extension. We'll also discuss

other chord extensions. But first, the review.

Chapter 28 Review

1. What is the definition of a chord?

2. What determines the quality of a chord?

3. How are chords named?

4. What are the parts of a triad?

5. Why are they called this?

6. How do you tell if a triad is Major?

7. How do you tell if a triad is minor?

8. What are the intervals in a Major triad?

1. *Three or more notes played simultaneously*
2. *The intervals within the chord*
3. *With a Roman numeral, a letter, and a quality of Major, minor, diminished or augmented*
4. *Root, third, fifth*
5. *Root is the bottom note of the chord; the third is a 3rd above the root; the fifth is a 5th above the root*
6. *Capital Roman numeral, or a capital letter only*
7. *Lowercase Roman numeral, lowercase letter, or "min" next to the letter name*
8. *A note a Major 3rd above the root and another a Perfect 5th above the root*

9. What are the intervals in a minor triad?

9. A note a minor 3rd above the root, and another a Perfect 5th above the root

10. What are the intervals in a diminished triad?

10. A note a minor 3rd above the root and another a diminished 5th above the root

11. What are the intervals in an augmented triad?

11. A note a Major 3rd above the root and another an augmented 5th above the root

12. What are the sound qualities of the different types of triads?

12. Major = happy; minor = sad; diminished = suspenseful; augmented = unsettling

---

Practical Use

1. Write out triads above the notes C, D, E, F and G. Sing or play these chords in an arpeggio (look this word up in the glossary if you don't know it) until you can hear each

note in the chord easily. Play these notes as a chord on a piano or guitar. Identify which
chords are Major and which chords are minor. Identify by singing or playing the minor
thirds and Major thirds within these triads.

CHAPTER 29

CHORD EXTENSIONS

I don’t care too much about music. What I like is sounds.

— Dizzy Gillespie (1917 - 1993)

In This Chapter

- General Chord Extension Information
- The Seventh Chord
- The Ninth Chord
- The 11th and 13th Chords
- Other Chords

General Chord Extension Info

A chord extension is a note that isn't in the triad. It's extra. Notes are added to triads to change their flavor, their feel, and in many cases the extension changes how the chord is used.

Some notes added to triads are: 7ths, 9ths, 11ths, and 13ths. We haven't talked about intervals higher than octaves (called compound intervals), so now's the time.

If you look at a scale, the 8th note is the same letter as the bottom note. Therefore, the 9th note is the same letter as the 2nd note of the scale, only it's an octave higher. The 11th is like a 4th, but an octave higher; the 13th is like a 6th, but an octave higher.

Chords with extensions are written with the number of the extension above and to the right of the chord letter, like so: A^{7}, G^{9}, $C^{\#11}$, F^{13}, D^{Maj7}, and so on. Extensions can also be used with Roman numerals, like V^{7}, IV^{9}, etc.

The number tells you which note you're adding to the triad. The number represents the interval from the root of the chord to the extension.

An extension can be altered a half step up or down to give yet another type of chord. In the examples I gave you above, there was a #11, and a Maj7. In these two cases you would raise the 11th a half step or use a Major 7th above the root, respectively.

On to some specifics.

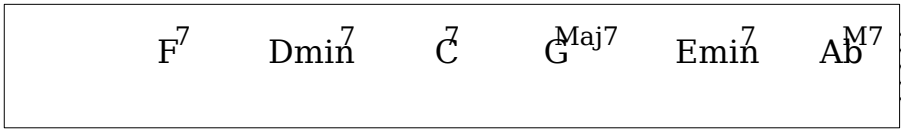
Seventh Chords

Seventh chords are an important type of chord in Western music. They are essential to most chord progressions, and give progressions the quality our ears are used to hearing. But we'll get more into chord progressions in Chapter 31.

The seventh chords have a property that other extensions don't have. When you see a seven next to a chord symbol, it's always a minor 7th above the root.

If you want a Major seventh above the root, you have to specify it in the extension by putting an “M” or a “Maj” or a small triangle “Δ” in front of the extension number.

Example 29.1 Some seventh chords.



As you can see in the above examples, the quality of the chord itself is written in larger letters next to the letter of the chord (except for Major chords which are just the letter), and any alterations to the 7th are written in small letters before the 7.

The Dominant Seventh Chord

There is a special kind of seventh chord which appears in a huge majority of chord progressions and it’s called the dominant seventh chord.

The dominant seventh chord symbol looks like this: V^7.

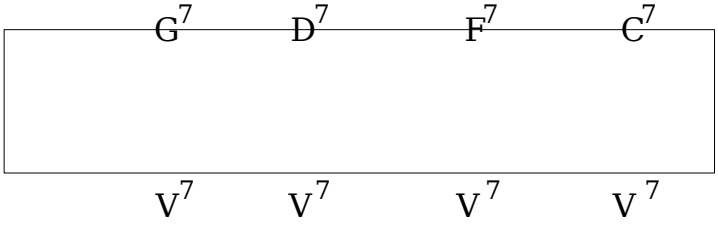
Because you know how Roman numerals are used, you know that the above symbol means that the chord is built on the 5th degree of the scale and it’s got a minor seventh in it.

I didn’t tell you each scale degree had a name when we went over scales because you had enough to worry about without me giving you more information than was necessary, but now it’s necessary.

Each scale degree has a name, and it just so happens that the name of
the 5th degree of the scale is “dominant.” So there you go. That’s why
a chord built on the 5th is called a dominant chord, and one with a
seventh is called a dominant seventh chord.

The dominant seventh chord is an important chord because it pulls our
ears back toward the tonic chord, or the I chord. But more on that in
Chapter 30.

Example 29.2 Dominant seventh chords in the keys of C, G, Bb, and F.



Notice above that each measure is in a different key signature. When you build a chord on the 5th degree of the scale in any Major key, the seventh of V^7 will automatically be a minor seventh because of the key signature.

Ninth Chords

Ninth chords have 5 chord tones: Root, third, fifth, seventh, and ninth.

As before, the quality of the chord is written in larger letters next to the chord letter, and the extensions are written in smaller letters above and to the right. If all you see is a “9”, the 7 is assumed. However, if you want a Major 7th in there (remember the 7th is always minor), you must specify it, as in the $G^{M7,9}$ and the $Ab^{+7,9}$ below.

Example 29.3 Some ninth chords.

F^{9} $Dmin^{9}$ $C^{7,9}$ $G^{Maj7,9}$ $Emin^{9}$ $Ab^{+7,9}$

Other Chords

Eleventh and Thirteenth Chords

The process for these chords is very similar to what you already know.
An eleventh chord will have a root, third, fifth, seventh, ninth and
eleventh.

A thirteenth chord will have a root, third, fifth, seventh, ninth, eleventh,
and thirteenth.

Chords Not Covered

There are several other types of chord which this book won't cover,
though I'll tell you what some are and you can discover them on your
own if you'd like.

There are suspended fourth chords, Neapolitan sixth chords, German
sixth chords, half diminished seventh chords, fully diminished seventh
chords, and many more.

Moving On

This chapter should allow you to understand and spell most chords you'll
come across. Again, the concepts you're now learning are more complex
than previous ones and they may take some time before they're understood well, so keep at it.

All the chords in this chapter have been in root position, the most basic
form of a chord. In the next chapter, you'll learn about chord inversions,
which is a chord with a note other than the tonic as the bottom note.

Chapter 29 Review

1. What is a chord extension?

2. How are chord extensions notated?

3. What is a compound interval?

1. A note that doesn't appear in the triad

2. With a number equal to the note's interval above the root

3. *An interval greater than an octave*

4. When you see ^{7}a to the right of a chord letter, what kind of a 7th is it?

4. *A minor 7th above the root*

5. How would you indicate a Major 7 above the root?

5. With a small triangle, a small "M", or a small "Maj" before the 7

6. What kind of chord is a V^7 ?

6. A dominant seventh chord

7. Why are V^7 chords so important?

7. They draw the ear to the tonic (I) chord, and appear in nearly all chord progressions

8. Spell the V^7 chord in the key of G.

8. D,F#,A,C

9. Which chord tones are in a 9th chord?

9. Root, 3rd, 5th, 7th, 9th

10. Which chord tones are in an 11th chord?

10. Root, 3rd, 5th,

7th, 9th, 11th

Practical Use

1. Write out the triads above C, A, B-flat, and A-flat. Put the chord name underneath
(don't forget Major/minor distinctions). Place the seventh in each of the chords and alter
the chord symbol as necessary to make it correct. Place the ninth in each chord and again
correct the chord symbol.

2. Sing or play (both is best) a Major triad. Any starting note will do but try to make it in
a comfortable range. As you are singing one note of the chord, try to hear the others
simultaneously. Once the Major triad is in your ear, add the seventh until you can sing or
play a seventh easily. Do the same with the ninth chord.

3. Spend some time messing around with triads and extensions on the piano. It’s fun and
will help your understanding.

CHAPTER 30

CHORD INVERSIONS

See deep enough, and you see musically; the heart of nature being everywhere music, if you can only reach it.

— Thomas Carlyle, Heroes and Hero Worship

In This Chapter

- More General Chord Information
- Close and Open Harmony
- First Inversion
- Second Inversion
- Third Inversion

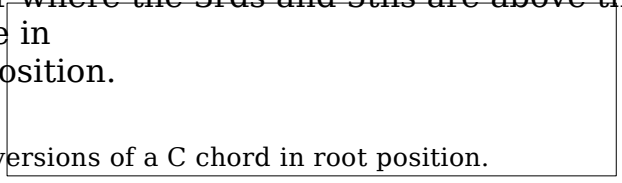
More General Chord Info

We've been working with chords which have been in what is called root
position, which is the most basic form of a chord. In root position the
notes are stacked neatly together as close as they can be.

There is a broader definition of root position. If the lowest note of a
chord is also the letter name of the chord, then that chord can be said to
be in root position.

For instance, with a C chord, as long as the C is the lowest note, it doesn't
matter where the 3rds and 5ths are above that C; the chord will still be in
root position.

Example 30.1 Three versions of a C chord in root position.



In the chords above, you'll find a C in the root, and above that root
somewhere an E and a G. There could be three Es and seven Gs but as
long as that C stays in the root position, it's a root position C chord. Any
doubling of chord tones doesn't affect the quality of the chord.

Voice

Any note of a chord can be said to be a voice of the chord. For example,
in a triad there are three voices: the bottom voice, the middle voice and

the top voice. The term voice is used even for music in which there is no
vocal part.

Open and Close Harmony

What is different about the chords above is how they are spaced. When a
chord’s tones are written as closely together as possible, as in the first

example above, that chord is said to be in close harmony, or close
position, and this is usually within an octave.

When a chord is spread out over more than an octave, or if there is a gap
between chord tones where another could be but isn't, as in the second
and third examples above, that chord is said to be in open harmony, or
open position.

First Inversion

A first inversion chord has the third of the chord as its bottom note. To
make a first inversion chord, take the tonic of a root position chord and
move it above the fifth. This will leave the third of the chord in the
bottom voice.

You'll often see chord letters marked in music, especially music with
lyrics. The letter name won't tell you anything about inversions or the
Roman numeral for that chord; you have to figure these out for yourself.
This is called harmonic analysis. Inversions and Roman numerals are
shown in harmonic analysis, which you'll see under the chords in the
examples below.

To mark the first inversion in harmonic analysis, a 6 is written above and
to the right of the Roman numeral. This is because the interval from the
bottom note (3rd of the chord, remember) to the tonic is now a 6th. If you
don't believe me, count it out in the examples below.

Example 30.2 First inversion chords in the key of C in close and open harmony.

C C C

6th

I^6 I^6 I^6

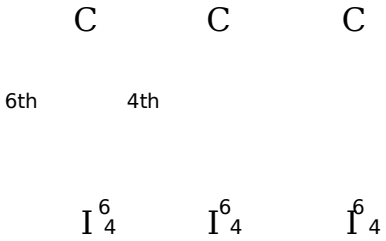
Second Inversion

A second inversion chord has the fifth of the chord as the bottom note.
To make a second inversion chord from a first inversion chord, simply
move the third up an octave. This leaves the fifth in the bottom voice.

In harmonic analysis, this inversion is shown by a 6 over a 4 next to the
Roman numeral. Again, these numbers represent the intervals above the
bottom note. In the second inversion C chord, it's a 6th from G to E, and
a 4th from G to C.

Because the 6 and 4 are only used in a harmonic analysis, when you see a
chord, you have to figure for yourself which inversion it's in. Not to fear;
at the end of the chapter is a step-by-step process to find out what any
type of chord is.

Example 30.3 Second inversion chords in the key of C in close and open harmony.



To keep things simple, I've only used the I chord, but these inversions
can be applied to any chord, the IV, the ii, the vi , anything.

If chords are stacked in close harmony, it's pretty easy to tell at a glance
whether it's a root position triad (three notes stacked one atop the other),
a first inversion (two stacked on the bottom), or a second inversion (two

stacked on the top).

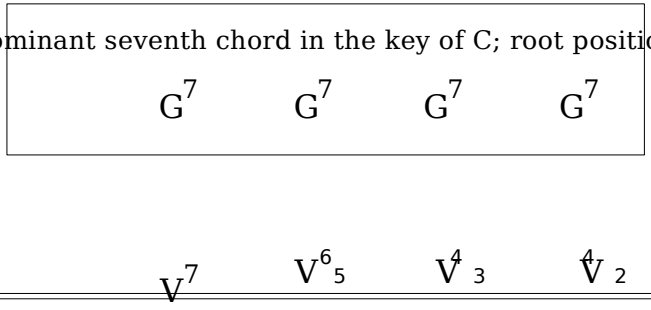
Keep in mind that I’ve used simple chords in only one clef, and chords
are often spread out over two clefs, but the same rules apply.

Inverting Seventh Chords

Seventh chords may also be inverted, and the symbols used for this in harmonic analysis are a little different but the concept is the same; the numbers tell you chord tone intervals above the bottom note.

With the extra note of the seventh chord, we get another inversion, called a third inversion.

Example 30.4 The dominant seventh chord in the key of C; root position and inversions.



How to Find a Chord's Name

1 Know the key signature you are working in.

2 Spell the chord using the letters in the chord. Ignore duplicate letters.

3 Stack the chord in close harmony, with the same root as the original chord. This is important because if you don't use the same root note you won't know if the chord is an inversion or not.

4 Determine what the tonic of the chord is. This will tell you the chord's letter name and Roman numeral in relation to the key you are in.

5 Determine if the chord is a first, second, or third (for 7th chords only) inversion.

6 Use the correct letters, Roman numerals and symbols to name the chord.

Moving On

Now that you can identify a chord and its inversion, you're ready for
information about chord progressions, or how one chord moves to
another chord.

The next chapter covers some of the most common chord progressions.

Chapter 30 Review

1. What is a root position chord?

2. What is close harmony?

3. What is open harmony?

4. What is harmonic analysis?

5. What is a first inversion chord?

6. What is the symbol for a first inversion chord?

7. Why is this symbol used?

8. What is a second inversion chord?

1. A chord with the tonic of the chord as the lowest voice of the chord.

2. When the notes of a chord are places as close together as possible.

3. A chord spread over more than an octave with space between chord tones.

4. A technique of identifying chord names and types, using Roman numerals and the symbols for chord inversions.

5. A chord with the 3rd of the chord as the lowest voice.

6. A small ^{6} to the right of the letter or Roman numeral.

7. It tells the interval between the third and the tonic, a 6th.

8. A chord with the 5th of the chord as the lowest voice.

9. What is the symbol for a second inversion chord?

9. $\frac{6}{4}$ above and to the right of the letter or Roman numeral

10. Why is this symbol used?

10. It tells the interval between the fifth and tonic (a 4th), and between the fifth and third (a 6th).

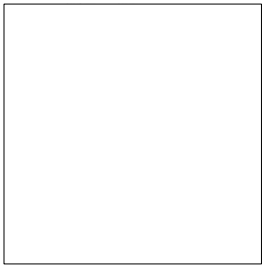
11. What is the name and Roman numeral for this chord in the key of C?

11. F, IV^6

12. What is the name and Roman numeral for this chord in the key of B flat?

12. Dmin, $iii^{\frac{6}{4}}$

13. What is the name and Roman numeral for this chord in the key of G?



13. G, I

Practical Use

1. Write out all the inversions for Bb^{M7}. Don't forget root position. Sing/play each inverted chord until it feels comfortable.

2. Identify at least 3 chords. Piano music, guitar music, and band or orchestra scores are excellent sources for many chords. Once you identify the chord name and quality of the chord, identify how that chord fits into the key signature of the song. Give the chord its Roman Numeral.

3. Mess around on the piano with inverted triads, and inverted chords with extensions.

CHAPTER 31

CHORD PROGRESSIONS

Do you know that our soul is composed of harmony?

— Leonardo da Vinci

In This Chapter

- What is a Chord Progression?
- General Chord Progression Guidelines
- The I IV^7 V I Progression
- The ii^7 V I Progression
- The iii vi ii^7 V I Progression
- The 12 Bar Blues Progression

What is a Chord Progression?

A chord progression is a pattern of movement from one chord to another.

Any piece of music has a chord progression. And even if it's a melody without chords at all, there is still a chord progression implied by that melody.

Chord progressions are often very simple, involving only a few chords, but they can also be quite complex. The chord progressions we'll be going over will be of the simple variety.

Chord progressions, especially the ones we'll be looking at, are repeated often many times throughout a piece of music. All of the progressions we'll be going over, with the exception of the 12 Bar Blues, can be found most often at the end of sections or songs.

Chord Progression General Guidelines

Voice Leading

Remember all those pesky details about chord inversions you learned in Chapter 30? Well, now you get to put that information to work, because inversions can make chord progressions sound more smooth.

Voice leading is how one chord tone (or voice) moves to another. There are certain general rules which, if you follow them, will give you a clean, clear chord progression. These aren't laws, but general guidelines. Feel free to experiment with them.

Doubling

Chord tones may be doubled without affecting the general quality of
the chord. Voices which are usually doubled are tonics and fifths.
Thirds are doubled less often, and extensions are rarely doubled. For
our examples, I’ll keep doubling to a minimum.

No Leaps

One of the first general rules is to avoid large interval skips from one chord tone to the next. This is called disjunct motion.

The bass, or lowest part, can pretty much ignore this rule without harming the sound of the chord progression.

For the purpose of a clear example, we'll ignore this rule for the introduction of each chord progression.

Keep the Common Tone

There will often be notes which two chords have in common. If at all possible, you'll want to keep these similar notes in the same voice from one chord to the next.

For example, from a C chord (C-E-G) to an F chord (F-A-C), there is a C which the chords have in common. If this C is in the top voice of the first chord, it should also be in the top voice of the second chord. This makes the chord change sound smooth, and is also much easier to sing or play.

Resolve Toward the Half Step

An essential component of chord progressions is the movement of half steps between chords. These are called leading tones and lead our ear from one note to another. You'll see these most—and they're most important—from the V^7 to the I chord.

If there is a half step from one chord to the next, move the appropriate voice toward the half step.

For example, in the key of C, the V7 chord (G-B-D-F) moves to the I

chord (C-E-G). The third and seventh (B and F) in the V7 chord should
move to the tonic and third (C and E) in the I chord, because they are a
half step apart.

Similar Motion

Similar motion is when two or more parts move in the same direction.

Parallel Motion

Parallel motion is a special type of similar motion in which the interval between the two parts remains the same from one chord to another. An example of parallel motion would be a Major third between the upper two voices in one chord moving down (or up) to a Major third in the top two voices of the following chord.

Most parallel motion sounds fine, but parallel fifths, fourths, and octaves are usually frowned upon by our ears and by those who adhere to the strict rules of counterpoint. Experiment with them to hear for yourself what they sound like.

Contrary Motion

Contrary motion is when two or more voices move in opposite directions.

A Word on the Examples

Again, to keep things simple and uncluttered, we'll use the key of C for all our examples, but these progressions can (and do!) happen in any key.

The first examples you'll see will be simple chords in root position in the treble clef. Once you've been exposed to the basic chord progression I'll then subject you to a more complex version with both treble and bass clef, and chords in inverted positions.

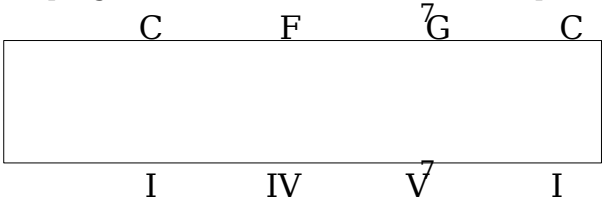
Now you know all you need to know, for the moment anyway, about chord progressions, so let's get to some actual examples.

The I IV V7 I Progression

This progression is probably the most common of all progressions in Western music. When you hear it, you'll most likely recognize it. It can be found in nearly every style of music, and though it will appear in other parts of a piece, it's most common at the end of a song or section.

Even if you don't consider yourself a piano player, sit down at one and play through these progressions. It might take some effort (and perhaps a review of the bass or treble clef), but it'll be worth it.

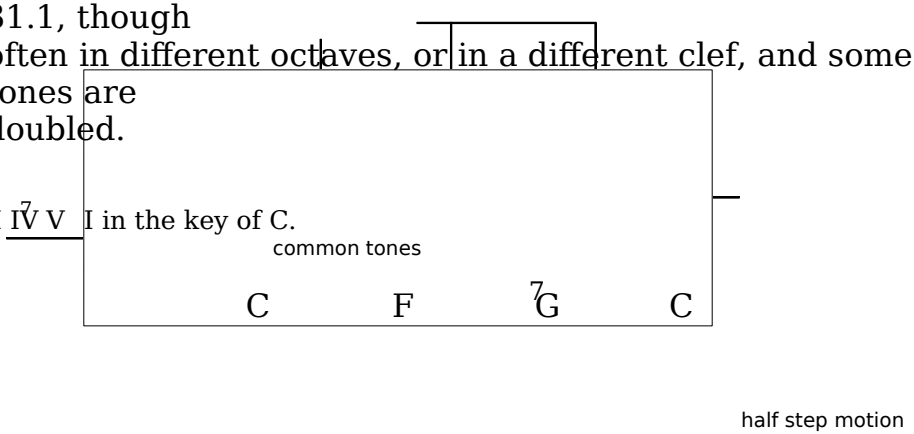
Example 31.1 The I IV V^7 I progression in C with chords in root positions.



The above example follows few rules of voice leading, but is simple and clear so you can see what the basic chord progression looks like. In the following example, you'll see bass and treble clef staffs connected with a bracket. This is called the grand staff and is what piano music looks like.

The example which follows has the same notes as example 31.1, though often in different octaves, or in a different clef, and some chord tones are doubled.

Example 31.2 I IV V^7 I in the key of C.



Notice that the IV chord is in the second inversion so that the common tone—the C—remains in the bottom voice; the F remains in the same voice from the IV to the V^7. The V^7 chord is also in the second inversion so that the bottom voice only moves a whole step from chord to chord.

And from the V^7 to the I, the leading tones resolve toward the half step.

The F goes down to the E, and the B in the bass clef goes up to the C.

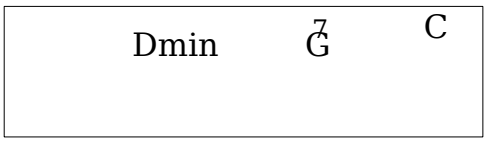
See if you can pick out some of the parallel motion, and some of the
contrary motion. It’s in there.

This progression is in relatively close harmony, and is only one of many,
many, many possibilities.

The ii V^7 I Progression

This is another very common chord progression, used in everything from
pop songs, to country to jazz and beyond.

Example 31.3 The ^{7}ii V I progression in the key of C, root position, treble clef.



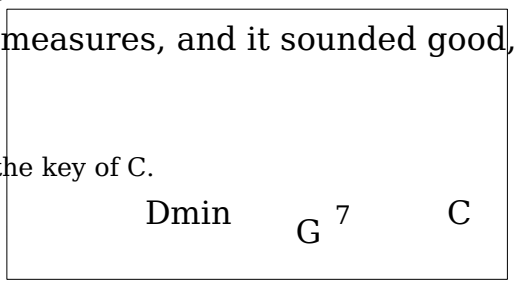
ii V^7 I

And now for the same progression, but following more of the guidelines
for voice leading.

This time, see if you can spot the voice doublings, the common chord
tones, and the half step motion.

As I began to write out the example below, a tune came on my stereo and
it caught my ear because it used the ii V I progression over and over for
several measures, and it sounded good, so I swiped it and put it below.

Example 31.4 ^{7}ii V I in the key of C.



ii^6 V^4_3 I

Play this one on the piano too, and try it in other keys as well as with

other voicings and other inversions. Once you get the sound in your head,
you'll recognize this progression all over the place.

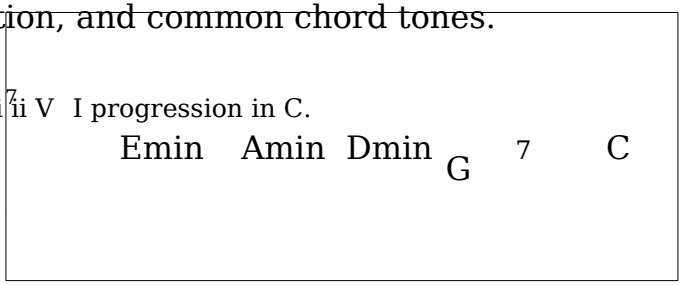
The iii vi ii V^7 I Progression

This is another very common chord progression which is simply a variation on the ii V^7 I progression. The difference of course is the added iii and vi chords before the ii V^7 I.

Because I'm sure you get how this works, this time I'm going to skip the basic chords in root position and go right to the good stuff.

See if you can pick out the chord tones of the iii and vi chords, and all the other stuff: voice doubling, parallel and contrary motion, half step motion, and common chord tones.

Example 31.5 iii vi ii V^7 I progression in C.



iii$^{6}_{4}$ vi ii^{6} V$^{4}_{3}$ I

Always be aaware of what instrument(s) you're writing for. The bass clef part in the example above has quite a stretch in the ii chord, something only a big-handed piano player would be capable of.

The 12 Bar Blues

Remember the blues scale? If not, take a look back at "The Blues Scale" on page 222. It's the scale that is associated with the 12 bar blues form.

There have been volumes and volumes written on the blues, and if you’re looking for in-depth coverage, this ain’t the place. This section will give you the vanilla version of the 12 bar blues.

Some artists, dead and living, who play and/or sing the blues are: Buddy Guy, Muddy Waters, Robert Johnson, Stevie Ray Vaughn, B.B. King,

John Lee Hooker.... The list is nearly endless and these are just a few of
the big names of the blues. Many many other artists also dabble in the
blues forms, from Eric Clapton to James Taylor.

The 12 bar blues is basically a 12 measure chord progression repeated
over and over for the entire song. There are variations, but 12 bars is so
standard that it's safe to say 95% of blues songs follow this format.

Each Roman numeral represents one measure, and if you count them,
there are 12. Try playing these chords in this order, and you'll most likely
recognize the sound.

Example 31.6 The basic pattern of the 12 bar blues.

I^7	I^7	I^7	I^7
IV^7	IV^7	I^7	I^7
V^7	IV^7	I^7	I^7

To find the right chord, simply put the chord letter in place of the Roman
numeral. In the below example, if we did it in the key of C, the chords
would be $I^7 = C^7$, $IV^7 = F^7$, $V^7 = G^7$.

Moving On

So there you have it: four of the most common chord progressions in one
easy chapter. Be sure to try all of these chord changes in as many keys as
you can stomach, in as many different ways as you can think of. You'll

be a much better musician for it if you do.

Coming up next, after the review for this chapter, is the review for all of
Part VI.

The next Part (and the last one!) covers more information on subjects you
already know, like dots after a note, faster types of notes, more accidentals, and some different meters.

Chapter 31 Review

1. What is a chord progression?

1. The movement from one chord to another

2. What is the rule about doubling chord tones?

2. Doubling the octave and fifth is common; doubling the 3rd less so; and doubling the extensions is rare

3. What is disjunct motion?

3. A leap of more than a second

4. What is the rule about disjunct motion?

4. Keep it to a minimum. Okay in the bass voice

5. What is the rule about common tones from one chord to another?

5. Keep the common tones in the same voice

6. What is contrary motion?

6. One voice goes up, the other goes down, or vice-versa

7. What is parallel motion?

7. Both voices moving in the same direction with the same interval

8. Which types of parallel motion should be avoided?

8. Parallel fourths, fifths and octaves

9. Which chords are used for the I ^{7}IV V I progression in the key of Bb?

9. Bb Eb^{7}, F , Bb

10. Where would you be likely to find this *a* progression?

10. At the end of section or song

11. Which chords are used for the ii V^7 I progression in the key of G?

11. Amin, D7, G

12. Which chords are used for the iii vi ii V^7 I progression the key of F?

12. Amin, Dmin, Gmin C^7, F

13. What is the basic progression for the 12 Bar Blues?

13. I I I I
IV IV I I
V^7 IV I I

14. Did you sit down at the piano and try to play these chords?

14. Please say yes.

Practical Use

1. In the key of F Major, write out an arrangement for piano, guitar, multiple voices, or instruments using the I, IV, V^7, I chord progression. Play or sing the progression as a group until it feels comfortable. Use the correct accidentals to change the progression to i, iv, V^7, i. Play the minor progression until it feels comfortable. Switch chord voicings.

2. Write out a chord progression in the key of C Major and try to break every rule of motion talked about in this Chapter. Play the example (if it's playable), and listen carefully to it. Why are certain changes of sound frowned upon?

3. Pick your favorite key signature. Outline the I chord by either playing or singing each chord tone. Try to hear the whole chord in your head as you do this. Do the same for the

IV chord and then the V. Try to do this exercise with two or more people at once. Be sure to specify a meter/beat and the length of each chord so you can change chords together.

Part VI Review

Whew! You Made It.

These pages can be used to test your memory about what you've learned in Part VI, and if some of the information hasn't stuck, you can go back and check it out on the page indicated below the question.

As with the chapter reviews, use your keyboard to cover up the answers while you test yourself.

The Review

1. What is the definition of a chord?
   page 246

1. Three or more notes played simultaneously

2. What determines the quality of a chord?
   page 246

2. The intervals within the chord

3. How are chords named?
page 246

3. With a Roman numeral, a letter, and a quality of Major, minor, diminished or augmented

4. What are the parts of a triad?
page 247

4. Root, third, fifth

5. Why are they called this?
page 247

5. Root is the bottom note of the chord; the third is a 3rd above the root; the fifth is a 5th above the root

6. How do you show a triad is Major?
page 248

6. Capital Roman numeral, or a capital letter only

7. How do you show a triad is minor?
page 249

7. Lower case Roman numeral, lowercase letter, or the abbreviation "min" next to the letter name

8. What are the intervals in a Major triad?
page 248

8. A note a Major 3rd above the root and another a Perfect 5th above the root

9. What are the intervals in a minor triad?
page 249

9. A note a minor 3rd above the root, and another a Perfect 5th above the root

10. What are the intervals in a diminished triad?
page 249

10. A note a minor 3rd above the root and another a diminished 5th above the root

11. What are the intervals in an augmented triad?
page 250

11. A note a Major 3rd above the root and another an augmented 5th above the root

12. What are the qualities of the different types of triads?
page 248, page 249, page 249, page 250

12. Major = happy; minor = sad; dim = suspenseful aug = unsettling

13. What is a root position chord?
page 260

13. A chord with the tonic of the chord as the lowest voice of the chord

14. What is close harmony?
page 260

14. When the notes of a chord are places as close together as possible

15. What is open harmony?
page 260

15. A chord spread over more than an octave with space between chord tones

16. What is a first inversion chord?
page 261

16. A chord with the 3rd of the chord as the lowest voice

17. What is the symbol for a first inversion chord?
page 261

17. A small 6 to the right of the letter or Roman numeral

18. Why is this symbol used?
page 261

18. It tells the interval between the third and the tonic, a 6th

19. What is a second inversion chord?
page 262

19. A chord with the 5th of the chord as the lowest note

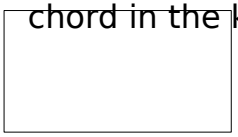
20. What is the symbol for a second inversion chord?
page 262

20. $\frac{6}{4}$ above and to the right of the letter or Roman numeral

21. Why is this symbol used?
page 262

21. It tells the interval between the fifth and tonic (a 4th), and between the fifth and third (a 6th)

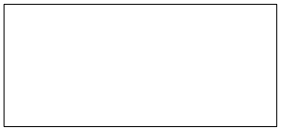
22. What is the name and Roman numeral for this chord in the key of C Major?



page 263

22. F, IV^6

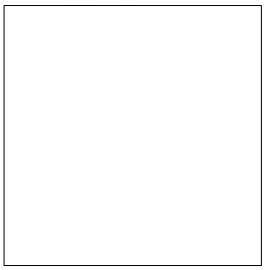
23. What is the name and Roman numeral for this chord in the key of B flat Major?



page 263

23. Dmin, iii $^{6}_{4}$

24. What is the name of this chord?



page 263

24. G, I

25. What is a chord progression?
page 268

25. The movement from one chord to another

26. What is the rule about doubling chord tones?
page 268

26. Doubling the octave and fifth is common; doubling the 3rd less so; and doubling the extensions is rare

27. What is disjunct motion?
page 269

27. A leap of more than a second

28. What is the rule about disjunct motion?
page 269

28. Keep it to a minimum. Okay in the bass voice

29. What is the rule about common tones from one chord to another?
page 269

29. Keep the common tones in the same voice

30. What is contrary motion?
page 270

30. One voice goes up, the other goes down, or vice-versa

31. What is similar motion?
page 269

31. Two or more voices moving in the same direction

32. What is parallel motion?
page 269

32. Both voices moving in the same direction with the same interval between them

33. Which types of parallel motion should be avoided?
page 270

33. Parallel fourths, fifths and octaves

34. What are the chord names for the I IV V^7 I progression in Bb?
page 270

34. Bb Eb, F ^{7}, Bb

35. Where would you be likely to find this progression?
page 270

35. At the end of a section or song

36. What are the chord names for the ii V^7 I progression in G?
page 272

36. Amin, D ^{7}, G

37. What are the chord names for the iii^{7} vi ii V I progression in F?
page 273

37. Amin, Dmin, Gmin C7, F

38. What is the basic progression for the 12 Bar Blues?
page 273

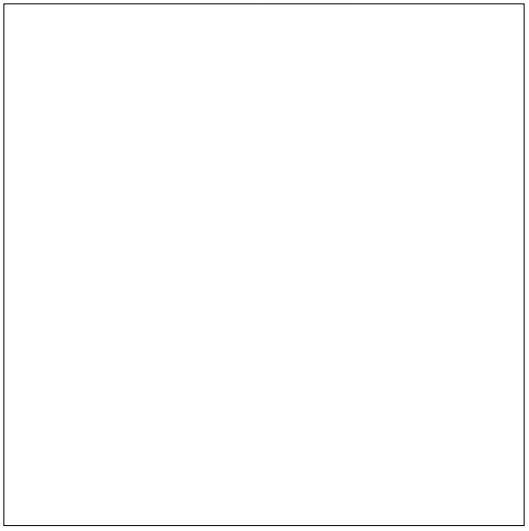
38. I I I I
IV IV I I
V ^{7}IV I I

PART SEVEN

More of the Same

In This Section You Will Learn:

- Thirty-second and Sixty-fourth Notes
- Double-dotted Notes
- Double Flats, Double Sharps
- 6/8 Time
- 2/2 Time
- Odd Meters



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CHAPTER

32

FASTER NOTES AND DOUBLE DOTS

You are the music while the music lasts.

— T. S. Eliot

In This Chapter

- Thirty-second Notes
- Sixty-fourth Notes
- Double Dots

Shorter Notes

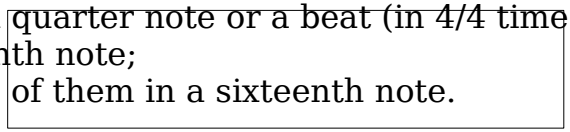
There are shorter notes than sixteenths.

Each time a beam or flag is added to a note, it's value is cut in half.
Remember when we added a flag to a quarter note? It became an eighth
note. Remember when we added another flag to the eighth? It became a
sixteenth. As with the other notes, when there is more than one of them,
the flags are connected and become a beam.

Thirty-second Notes

And so, we're going to add a flag to the sixteenth and cut its value in half,
making it a thirty-second note. Just like the name implies, there are thirty
two of them in a whole note; sixteen of them in a half note; eight of them
in a quarter note or a beat (in 4/4 time); four of them in an eighth note;
two of them in a sixteenth note.

Thirty-second notes are fairly rare, but you'll probably run into them now
and then, often as grace notes (quick notes just before the main note).



Example 32.1 Two single 32nd notes with flags, and a beat of barred 32nd notes with stems up and down.

Sixty-fourth Notes

These are even more rare, and it's likely that you'll never see them, but I
thought I'd throw them down on the page for your enjoyment.

Same deal with the flag/beam. Add another beam to the 32nd note and it
cuts the length in half. So, for sixty-fourth notes there are: 64 in a whole
note, 32 in a half note, 16 in a quarter note or one beat (in 4/4 time), 8 in
an eighth note, 4 in a sixteenth note, and two in a thirty-second note.

Example 32.2 Two single 64th notes, and 1/2 beat of barred 64ths with stems up and stems down.

Double Dotted Notes

You already know that a dot lengthens the note it follows by half the amount of the original note.

Another dot after that first dot also lengthens the note, but by half the amount of the first dot.

An easier way to say this is that a double dot increases the length of a note or rest by 3/4 of its original value.

So a double-dotted whole note or rest is 7 beats. A double-dotted half note or rest is 3 1/2 beats, a double-dotted quarter note or rest is 1 3/4 beats, and a double-dotted eighth note or rest is 7/8 of a beat.

We could continue the process, but it's pretty safe to say you'll probably never see a double-dotted sixteenth, thirty-second, or sixty-fourth note.

Because and it sounds right and is easier to read and play, a double-dotted note will usually be paired with whatever note finishes out the beat or measure. Take a look at the examples below and you'll see what I mean.

Example 32.3 Double-dotted whole, half, quarter, and eighth notes.

Moving On

Okay, only a few more chapters to go in the book! Use the review to
make sure you've understood the details of faster notes and double dots.

Coming up is a very short chapter on double sharps and double flats.

Chapter 32 Review

1. How do you cut the length of a note in half?

1. Add a flag or beam

2. What note is half the length of a sixteenth note?

2. 32nd note

3. What note is one fourth the length of a sixteenth note?

3. 64th note

4. How many 32nd notes in one beat of 4/4 time?

4. 8

5. What does a double dot do to a note?

5. Increases its length by 3/4 of the note's original value

6. How long is a double-dotted quarter rest?

6. 1 3/4 beat

7. Which note is usually paired with a double-dotted quarter note? Why?

7. 16th note. It finishes out the beat. Sounds better and is easier to read an play.

Practical Use

1. Write out 4 measures of 8/4 time. Use at least two double-dotted notes per measure, but see if you can use them all. Play and sing what you've written.

2. Write out another 4 measures of 8/4 time. This 4 measures is meant to be a harmony part to what you composed in exercise 1, so don't choose the same notes, though you may use the same rhythms (hint: 3rds, 4ths, 9ths and 5ths sound good). Find a friend and sing or play both parts together.

CHAPTER

33

DOUBLE FLATS, DOUBLE SHARPS

If I were to begin life again, I would devote it to music. It is the only cheap and unpunished rapture upon earth.

— Sydney Smith, 1814

In This Chapter

- Double Flats
- Double Sharps
- A Werd on Speling Kords

Double Your Fun

Welcome to the shortest chapter of the book. You're about to learn double sharps and double flats, but before you do, I'd like to tell you why.

There are several ways to say the sound to, two, too. Even though each sounds exactly the same, they have different meanings. Just as you wouldn't write, "I went two the store," so you wouldn't spell a Dbdim chord with a G. I'll show you this in detail in just a moment. First the details about how to write double flats and sharps.

Double Flats

A double flat lowers a note by one whole step. It looks like this .

You won't see them very often, but now and then double flats are necessary in order to spell a chord or an interval correctly, and it will often be a minor or diminished interval in a flat key. An example follows.

Double flats are easy. Just put two flats close together before the note they are to alter.

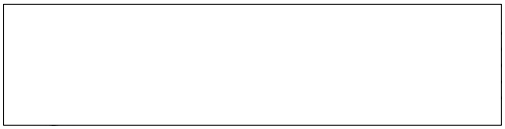
Example 33.1 B double-flat, E double-flat, and A double-flat.

Double Sharps

A double sharp raises a note by one whole step.It looks like this
.

You’ll see a double sharp about as often as you’ll see a double flat. These
will usually pop up when augmented intervals are needed in a sharp key.

Example 33.2 G double-sharp, C double-sharp, and F double sharp.

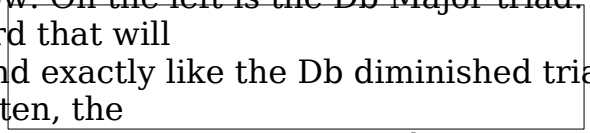


You'll be glad to hear there are no such things as double naturals, triple
sharps or triple flats.

A Werd on Spelling Kords

Here's why such pesky things as double sharps and flats exist.

Stay with me here. The Db Major triad is spelled Db, F, Ab, right? Well,
for a diminished chord, the third and fifth of the chord have to be lowered
a half step. A half step down from F is E, and a half step down from Ab is
G, right? But even though those pitches would sound correct, you can't
write them that way and still have a Db diminished triad. Take a look
below. On the left is the Db Major triad. In the middle is a chord that will
sound exactly like the Db diminished triad, but the way it's written, the
chord is actually an inverted e minor dim7. The correct spelling of Db
dim. is on the right.



Example 33.3

Db e min dim7 Db dim

Even though it makes things a little crowded, for the Db dim chord to be
spelled correctly, we have to use an Fb, and a double-flatted A.

I know it’s weird, but I didn’t make up the rules. Don’t kill the messenger.

Moving On

Double sharps and double flats are pesky things that you probably will see if you continue long enough with music, so even though you won't use them often, it's good to know what they are, and now you do.

Only one lesson left! It's on meters we haven't covered yet which include 6/8 time, cut time, and some odd meters, like 7/4.

Chapter 33 Review

1. Why are double flats and double sharps used?

1. To spell certain chords and intervals correctly

2. What does a double flat do to a note?

2. Lowers it one whole step

3. What does a double flat look like?

3. Two flats close together in front of a note

4. What does a double sharp do to a note?

4. Raises it one whole step

5. What does a double sharp look like?

*5. An **X***

6. What does a triple flat look like?

6. No such thing

Practical Use

1. Write out the following key signatures with their Major scale: Eb, Ab, B, and E.
One line below these scales, write the following intervals: a diminished fifth above

Eb, a diminished fourth above Ab, an augmented fifth above B, and an augmented
sixth above E.

CHAPTER

34

MORE METERS

After playing violin for the cellist Gregor Piatagorsky, Einstein asked, “Did I play well?”

Piatagorsky replied, “You played relatively well.”

In This Chapter

- Cut Time
- Slow 6/8 Time
- Fast 6/8 Time
- Odd Meters

Beyond 4/4 Time

The majority of music has the quarter note as its pulse and is in a duple meter (the top number is divisible by 2), but there is a whole lot of great music out there that has a different pulse, and even some with an odd meter.

Remember way back in Chapter 13 when we went over meters for the first time? The top number tells you how many beats in a measure and the bottom number tells you which note gets one beat. For a refresher, see Chapter 13 “Meter” on page 101.

Cut Time, or 2/2 Time

This is a very common meter. It’s typically shown with the symbol “C ,” but may also be written 2/2. The top number tells you there are two beats in each measure, and the bottom number tells you that the half note gets one beat.

Essentially, all note lengths in cut time are cut in half. Half notes act like quarters; quarters act like eighths, etc. Because of this, the counting is a little different, but the foot tap is the same. In the example below your foot hits the floor on the numbers.

Example 34.1 A few measures of cut time with the counting.

1 + 2 + a 1 2 e + a (1) + (2) + 1-
2

6/8 Time

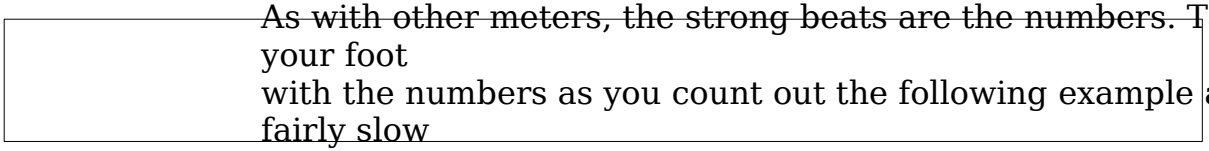
Six-Eight time is fairly common and one of the more confusing basic
time signatures, but I’ll break it down for you so it’s easy to understand.

First of all, from the top number, you know that there will be six beats per measure. And the bottom number tells you that the eighth note gets one beat.

It’s the eighth note getting the beat which is confusing. This throws everything out of whack from what you’re used to. Eighth notes get one beat, quarter notes get two beats, dotted quarters get three, half notes get four, and dotted halfs get six. No whole notes in this time signature; they’re too long.

As with other meters, the strong beats are the numbers. Tap your foot with the numbers as you count out the following example at a fairly slow tempo. Sing it. Play it.

Example 34.2 A few measures of slow 6/8 time with counting.



Simple 6/8 versus Compound 6/8

If that’s all there was to 6/8 time, it would be much easier to understand, but there’s more. The example above is in simple 6/8 time, also called slow 6/8 time. What you see in simple 6/8 is what you get, the 8th note gets one beat and there are six beats per measure.

Compound 6/8, or fast 6/8, is counted differently and has a different feel.

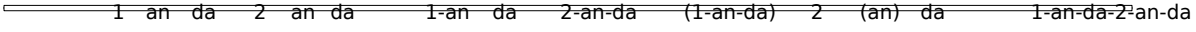
In compound 6/8, the pulse is the dotted quarter note. To get this feel,
try the following: say the numbers 1-6 quickly, but give emphasis to the
numbers 1 and 4. Like this: 1 2 3 4 5 6, 1 2 3 4 5 6, etc.

So in fast or compound 6/8 time, there are only two pulses per measure,
each beat subdivided into three. This is counted with the following
syllables: 1 an da 2 an da, 1 an da 2 an da, etc. Your foot hits the floor on
the numbers. Dotted quarter notes get one beat each.

Let’s use our same example, but this time it will go much more quickly,
and will also be counted differently.

Compound 6/8 has a triplet feel. Your foot taps down with the numbers,
and remember that the pulse is now a dotted quarter note. Try counting it
out loud, first at a comfortable tempo, then speed it up. Sing it. Play it.

Example 34.3 An example in fast 6/8 time with counting.



Odd Meters

Occasionally you’ll hear or see music in an odd meter. When you listen
to it, the clue is that it’s difficult to find the pulse, and when you do find
the pulse, it changes. Odd meter pieces can be difficult to tap your foot
with unless you know the meter.

An odd meter has an odd number greater than 3 as the top number of the
time signature. Some examples might be 5/4, 7/4, 5/8, or 7/8. These are
the most common odd meters, but that shouldn’t stop you budding
composers from trying a piece in 11/8 or 13/4.

The counting for odd meters is the same as more familiar meters, but
with a different number of beats per measure.

Most odd meters are grouped in 2s and 3s, and often there will be

directions above the meter (or in the meter itself) telling you what this
grouping is.

For example: a meter with a 5 on top—5/4 or 5/8—can be 2 + 3 (counted
1 2 3 4 5), or 3 + 2 (counted 1 2 3 4 5).

A meter with a 7 on top—7/4 or 7/8—can be 2 + 2 + 3 (counted 1 2 3 4 5
6 7) or 3 + 2 + 2 (counted 1 2 3 4 5 6 7), or even 2 + 3 + 2 (counted 1 2 3
4 5 6 7), though this last version I’ve never seen.

If you'd like to hear a master of odd meters, listen to some Dave Brubek,
especially the tunes Take 5, in 5/4 time, and Blue Rondo alla Turk, in
7/8.

Moving On

Congratulations! After you are able to complete the final reviews, you're
done! It's been a long haul, and don't be surprised if you forget a lot of
what you learned—that's perfectly normal. If you do forget, now you
know where to go to find the answers you need. The more you use this
information, the more it will stick in your memory.

The only thing left is the final review for this Part. It's a short one.

If you can answer the questions on all the study guides for all the Parts,
you now have an excellent foundation in music theory. Good job!

Chapter 34 Review

1. What is the numerical time signature for cut time? *1. 2/2*

2. How many beats does a whole note get in cut time? *2. 2*

3. How many eighth notes in one beat of cut time? *3. 4*

4. How would 4 quarter notes be counted in cut time? *4. 1 + 2 + 3 + 4 +*

5. What note gets one beat in slow 6/8 time? *5. 8th note*

6. How many beats are in each measure of slow 6/8 time?

6. 6

7. How many beats do quarter notes get in slow 6/8?

7. 2

8. How many beats do dotted half rests get in slow 6/8?

8. 6

9. How many pulses are in a measure of complex, or fast 6/8 time?

9. 2

10. What note gets one beat in fast 6/8 time?

10. dotted quarter

11. What is the counting for a measure of 8th notes in fast 6/8?

*11. **1** an da **2** an da*

12. How do you tell if a song is in an odd meter?

12. Can't easily tap your foot to it, or there is an odd number greater than 3 as the top number of the time signature.

13. How are the beats in 5/4 time grouped?

13. 2+3 or 3+2

14. How are the beats in 7/8 time grouped?

14. 2+2+3 or 3+2+2 or 2+3+2

Practical Use

1. Write out an 8 measure melody in 5/4 time.

2. Charles Ives, an American composer, often used two meters at once in a piece of music. Write a 10 measure harmony part to number one, but use 4/4 time (10 measures of 4/4 = 8 measures of 5/4). Find a friend and sing/play what you've written.

34: More Meters

Part VII Review

Whew! You Made It.

These pages can be used to test your memory about what you've learned in Part VII, and if some of the information hasn't stuck, you can go back and check it out on the page indicated below the question.

As with the chapter reviews, use your keyboard to cover up the answers while you test yourself.

The Review

1. How do you cut the length of a note in half?
   page 288

   1. Add a flag or beam

2. What note is half the length of a sixteenth note?
   page 288

   2. 32nd note

3. What note is one fourth the length of a sixteenth note?
   page 288

   3. 64th note

4. How many 32nd notes in one beat of 4/4 time?
page 288

4. 8

5. What does a double dot do?
page 289

5. Adds 3/4 the length of the rest/ note it follows

6. How long is a double-dotted quarter rest?
page 289

6. 1 3/4 beat

7. What note is usually paired with a double-dotted quarter note? Why?
page 289

7. 16th note. It finishes out the beat, is easier to read and play.

8. Why are double flats and double sharps used?
page 292

8. To spell certain chords and intervals correctly

9. What does a double flat do to a note?
page 292

9. Lowers it one whole step

10. What does a double flat look like?
page 292

10. Two flats close together in front of a note

11. What does a double sharp do to a note?
page 292

11. Raises it one whole step

12. What does a double sharp look like?
page 292

*12. An **X***

13. What does a triple flat look like?
page 292

13. No such thing

14. What is the numerical time signature for cut time?
page 296

14. 2/2

15. How many beats does a whole note get in cut time?
page 296

15. 2

16. How many eighth notes in one beat of cut time?
page 296

16. 4

17. How would 4 quarter notes be counted in cut time?
page 296

17. 1 + 2 + 3 + 4 +

18. What note gets one beat in 6/8 time?
page 296

18. 8th note

19. How many beats are in each measure of slow 6/8 time?
page 297

19. 6

20. How many beats do quarter notes get in simple, or slow 6/8 time?
page 297

20. 2

21. How many beats do dotted half rests get in slow 6/8?
page 297

21. 6

22. How many pulses are in a measure of complex, or fast 6/8 time?
page 297

22. 2

23. What is the counting for a measure of 8th notes in fast 6/8?
page 297

*23. **1** an da **2** an da*

24. Which note gets one beat in fast 6/8 time?
page 297

24. dotted quarter

25. How do you tell if a song is in an odd meter?
page 298

25. Can't easily tap your foot to it, or there is an odd number greater than 3 as the top number of the time signature.

26. How are the beats in 5/4 time grouped?
page 298

26. 2+3 or 3+2

27. How are the beats in 7/8 time grouped?
page 298

27. 2+2+3 or 3+2+2 or 2+3+2

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CHAPTER 35

Postlude

WHAT COMES NEXT

Too many pieces finish too long after the end.

— Igor Stravinsky

In This Postlude

- More To Learn
- Theory Ain't Everything
- Drop Me an e-mail

So Much More

Congratulations for getting through a huge load of information. Because there is so much that you've learned, don't be surprised if you forget parts of it, and feel free to go back and review anything you need to review. It's normal.

Even though you've taken in a great deal of information, there is much, much more left to be learned, if you're willing to learn it. Things like more advanced chord progressions, more chord extensions, transposing from one part to another, arranging music, composing music, and on and on and on.

It's exciting how much there is to learn; a lifetime's worth, really.

Theory Ain't Everything

Keep in mind that music theory is only one of many tools to be used to become a better musician. The music is the master, and the quest for a better performance of the music is the reason for this factual, rule-based method of writing down the sounds.

With so many rules and regulations in music theory, it can be easy to get away from the ultimate goal of music theory, which is to enable you to produce and perform better music.

So keep making music, with all your heart and all your brains.

Drop Me An E-mail

If you notice problems or inconsistencies or downright mistakes, please
let me know so I can make this a better book in future editions.

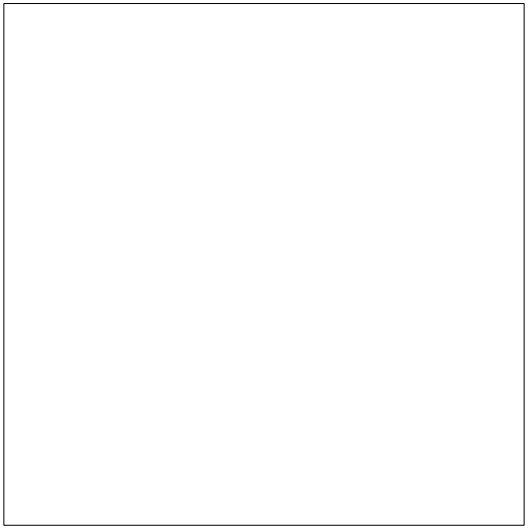
And of course, if you liked the book and it helped you, I'd love to hear
about it. You can reach me at harnum@questionsink.com

Due to limited time, and the volume of e-mails I receive, it's tough to
answer music theory-related questions, but feel free to give it a try
anyway.

Thanks.

APPENDIX

Teacher Information
Musical Terms Glossary
Index
Blank Staff Paper
Order Forms
Piano Keyboard



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Teachers! Free Teach-Aids

Get The Most out of Basic Music Theory

It's okay, we can admit it. Everyone would rather play music than study music theory, teachers and students alike. No big surprise there, right? Yet we all know the important role theory plays in communicating a musical idea. Despite this knowledge, music theory isn't taught for several reasons: no good methods students enjoy, no time, and no money to buy books, are only a few reasons.

So what's the answer? Theory in small, enjoyable doses from a program designed as a cost- and time- effective teaching tool. This book.

Though it works well for individuals, Basic Music Theory was written specifically for use in the classroom. Its clear explanations, short chapters, and reviews make it a low-maintenance option for teachers with limited time (and we all have limited time, right?).

The Classroom Packet

The Classroom Packet is an addition which complements Basic Music Theory. In it are Chapter and Part quizzes, student tracking forms, book tracking forms, and additional information like how to

schedule time for theory, how to pay for books, and fun yet productive rehearsal suggestions.

Combined with the Classroom Packet, Basic Music Theory is the best method for teaching music
theory to be found anywhere, and it works with classes of all sizes.

Quizzes

Though I’m aware that multiple-choice tests are a poor way to determine comprehension, they are
very efficient. With our limited time, and class sizes that exist only in other teachers' nightmares,
efficiency is a must.

All quizzes are in a multiple choice format with a quick-correct key to make correcting
an easy task for an aide.

Each Chapter and Part Quiz has 4 different versions to curb cheating. These can be
rotated in a 4-year period, or month-to-month, or any way you think most effective.

Student Tracking Form

Also included in the Classroom Packet is a Student Information Form which includes
class name, period/time, semester/year, student name, year, and condition of their book
(new, good, used). There are spaces for over 100 students.

The form is shaded so students (and you) can find their information quickly and easily.
Each chapter has one column to indicate date begun and date passed. Grades can be
entered here also if you choose to use a grading system. More about assessment in the
Extra Section below.

Student Fee Forms

A set of books is a significant investment of your program's resources, and just as a
student is charged for damage to a borrowed instrument, so they are also responsible for
damaged books.

The Student Fee Form has dollar values for books in conditions from new to damaged
and is also shaded for convenient location of information. There are several more
columns for other fees the student may owe, including a column for funds the student
may have through fund raising.

Extras

All sections of the Classroom Packet are clearly explained with suggestions to make
their use easy and productive. Included in the Classroom Packet are suggestions for

scheduling time for theory and systems of grading. Also included are some special
rehearsal techniques which students and directors alike enjoy and benefit from.

To Order

The Classroom Packet is entirely free at
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Musical Terms

A

a
a, á (It): At, by, for, with.

A 440: The note A above middle C, with frequency of 440 vibrations per second. The note which orchestras and music ensembles universally tune with.

a cappella (It): Without accompaniment.

accelerando: Becoming faster.

accent (Eng):To emphasize or stress a note, indicated by the symbol " > ". The three main kinds of accents are agogic, dynamic, and tonic.

accidental: Sharps, flats or natural signs; used to raise, lower or return a note to its normal pitch.

accompaniment: Secondary musical material, supports more important material.

acoustic: An instrument that produces sound without the use of electronic amplification.

acoustics 1: The science of sound. 2: The physical properties of an instrument or room as related to sound.

adagietto (It): A little faster than adagio.

adagio (It): "At ease." A slow tempo between largo and andante.

à demi-voix (Fr): With half the voice, whispered.

à deux, a due (Fr, It): For two instruments or voices (to be played or sung in unison).

ad libitum, ad lib. (Lat.): "At will." the performer improvises freely and may vary the tempo.

Aeolian: A medieval mode whose half- and whole-step pattern is that of playing A to A on the white keys of the piano (same as the natural minor scale).

affrettando (It): Hurrying.

agitato (It): Agitated, excited, hurried, restless.

agogic accent: Emphasis is given to a note by making it longer than normal.

air: A song or melody.

al, all', alla, alle (It) 1: "To the." 2: In the style of (e.g., alla valse, "in a waltz style").

al coda (It): "To the coda."

al Fine (It): To the end.

allegro (It): "cheerful." A lively, fast tempo; allegro assai, very fast; allegro di bravura, fast, bright and spirited; allegro moderato, moderately fast.

alphorn: A wooden horn up to 10 feet long, curved slightly at the end with an upturned bell; from Switzerland.

al segno (It): Return to the sign (see dal segno).

alt (It): "High." the notes from G to F that fall above the fifth line of the treble clef.

alteration: The raising or lowering of a note with an accidental.

altered chord: A chord in which a note(s) has been raised or lowered chromatically.

altissimo (It): "Most high." The highest notes; the octave above the alt.

alto (It): "High." the highest male singing voice and lowest female singing voice.

alto clef: The C clef on the third line of the staff. Used by the viola.

alto flute: See flute.

alto saxophone: See saxophone.

amabile (It): Amiable, gentle.

anacrusis (Gr.): Pickup or upbeat or preparatory beat.

andante (It): "Going." A moderate tempo between allegretto and adagio.

andantino (It): Originally a tempo a little slower than andante, but now indicates a tempo a bit faster than andante.

animato, animoso (It): Animated, energetic or spirited.

anticipation: Nonharmonic note or notes played before the chord in which it belongs.

antiphonal: Alternating singing or playing by separate groups of performers; originally separated also by distance.

appassionato (It): Passionately.

appoggiatura (It): An accented nonharmonic note that resolves to a harmonic note.

arcato (It): "Bowed." For string instruments, indicates to use the bow.

archet, archetto (Fr): For string instruments, the bow; to bow.

arrangement: A different version of composition.

arsis (Gr.): The upbeat.

articulation: The degree to which are separated or connected, such as staccato or legato.

assai (It): Very, extremely.

a tempo (It): Return to the tempo.

atonal: Music lacking a center.

attacca (It): Go on, proceed to next section. Segue.

attack: The beginning of a phrase.

a 2: For 2 instruments or voices.

augmentation: A lengthening of the duration of notes in a theme.

augmented: Raised, enlarged.

augmented chord: A triad a root, major third, and augmented fifth.

augmented sixth chord: A chord the interval of an augmented sixth resolving upward to an octave.

augmented interval: A major or perfect interval raised by a half step.

authentic cadence: A cadence with a progression from the dominant (V) chord to the tonic (I) chord.

B

back beat: Used with drums, emphasis on beats 2 and 4.

balance: the harmonious adjustment of volume and sound quality between instruments and/or voices.

bar: A measure; the space bar lines. Also, the bar line itself.

baritone: A male singing voice higher than bass but lower than tenor.

baritone horn: A brass similar to the euphonium, but with 3 valves and smaller bore.

baritone saxophone: see saxophone.

bar line: Vertical line through a staff to separate measures or bars.

barre (Fr): Used for guitars; sever strings with a single finger the fretboard.

bass 1: The lowest male singing voice. 2 The lowest part in music. 3 Electric

alla breve (It): A duple time signature, usually 2/2.

allargando (It): Growing broader and slower.

allegretto (It): A cheerful fast tempo, a little slower than allegro.

arco (It): "Bow". For string instruments, indicates to use the bow.

arpeggio (It): The notes of a chord played in succession; a broken chord.

arraché (Fr): Strong pizzicato.

bass, bass viol, upright bass.

bassa (It): Low.

bass clef: The clef which names the 4th line of the staff as F.

baroque basso continuo (It): Used in the era; an accompaniment usu.

improvised with numbers indicating indicating the harmony.

bassoon: A double-reed instrument with low pitch.

baton: Conductor's wand.

beam: A horizontal line used in place of flags to connect short notes.

beat 1: A rhythmic unit of time. 2: To mark time.

beats: pulses caused by sound waves of slightly different frequency.

bebop: A form of jazz invented by Dizzy Gillespie and Charlie Parker; uses improvisation, complex rhythms and harmonies.

bend: A change in pitch, usu. a half or whole step. Used with voice, guitar, harmonica and other instruments.

big band: Jazz band playing dance music. Popular in '30's and 40's, experienced a renaissance in late '90's.

bitonal: A composition using two keys sounding at the same time.

bluegrass: Folk music, usu. fast tempo with banjo, fiddle, bass, mandolin, and harmonic use other instruments.

blue notes: Notes played/sung below the intended pitch (usu 3rd, 7th, 5th). Used in blues music.

blues: the basis of jazz. Originated from African vocal music; minor 3rd and 7th of scale. Form is 12 bars long.

Boehm system: System of keys used with woodwind instruments perfected by Theobald Boehm.

bones 1: Percussion instrument of African origin, a pair of sticks/bones held between the fingers and clicked in rhythm. 2: Slang for trombones.

bore: The diameter and shape of the tube of a wind instrument.

bow: The device drawn across the strings of string instruments like violin, cello, etc. A stick ~3 ft. long with horsehair stretched between the ends.

brace: A curved line which connects the staves for instruments which use more than one staff.

bracket: A straight line with curved ends which connects staves for different piece. In

breve: Originally a short note, has come to mean a long note equalling two whole notes.

bridge 1: A transitional section in a piece of music. 2: A piece of wood that supports the strings and holds them away from the body of the instrument.

brillánte (It): Brilliant.

brio (It): Vigor, spirit. Con brio.

broken chord: Notes of a chord played in succession rather than simultaneously.

brushes: Thin wire brushes used on percussion instruments, esp. in jazz.

bull roarer: An instrument originating in aboriginal Australia consisting of a thin piece of bone or wood of special shape tied to rope and whirled vigorously about one's head. Makes a very loud roaring sound.

BWV (abbr.): "Bach-Werke Verzeichnis." A method of cataloguing Bach's work.

C

cabasa (Sp): Percussion instrument. A gourd covered with beads; a cylinder of metal covered with beads of metal.

cacophony: Dissonant sound. Usu. loud and unpleasant.

cadence: The ending of a piece or section, usu. applied to chord progression (e.g. deceptive cadence, perfect cadence, etc.).

cadenza: An unaccompanied solo passage usually near the end of a piece. Either ad lib or written by composer.

caesura: A sudden pause or break, shown by the symbol //.

calma, calmando (It): Calming, quiet, tranquil.

calypso: A type of rhythm or song originating in Trinidad.

cancel: Another name for the natural sign used to remove the affect of an accidental.

canción (Sp): Song.

cantabile (It): In a singing style.

capo 1:The head, beginning, or top. 2: A device placed across the strings of an instrument to raise the pitch.

C clef: A moveable clef names middle C.

celere (It): Quick, rapid.

chalumeau (Fr): The low register of clarinet.

changes: Slang for chord changes.

chanson (Fr): Song.

chart: The score or parts of an instrumental ensemble, usu. pop or jazz.

chest voice: the low register of the voice.

choir: A group of singers of sacred music.

choke cymbal: 1: The hi-hat cymbals on the drum set. 2: Verb meaning to silence a cymbal quickly.

chops: Slang for a player's ability.

chord: Three or more tones sounding simultaneously.

chorus: 1: The refrain of a song. 2: A group of singers of secular music.

chromatic: Moving by half steps.

chromaticism: Melodic or the use of tones other then those of the diatonic scale.

chromatic scale: A scale made up of 12 half steps in succession.

circle of fifths: The succession of keys progressing by fifths.

circular breathing: A technique used by wind players in which air is expelled from the mouth while inhaling through the nose.

clam: Slang for a wrong note.

classical 1: Music of a "serious" (non-pop) nature. 2: The time period from the late 1700's to the early 1800's.

claves: Percussion instrument from Cuba; round hardwood sticks hit against each other.

clef: A symbol at the beginning of a piece of music which shows the names of the lines and spaces of the staff.

close harmony: Harmony with the chord tones as close together as possible.

cluster: group of notes with the interval of a second.

coda (It): Closing section of a

instruments playing simultaneously.

break 1: The point at which a voice (e.g. to shifts from the chest register to the head (falsetto) register. 2: The change in woodwind instruments (esp. clarinet) from the lower register to the higher register. combination. A

capriccio: A piece played in a free, playful style.

castrato (It): An adult male singer with a soprano or alto voice.

catgut: Formerly used as material for string instruments. Actually sheep or goat intestines.

written music a separate section after repeating a previous section D.C. al Coda; D.S. al Coda). Indicated by the symbol .

col legno (It): Playing with the wood part of the bow.

combo (abbr.): Short for small group of instrumentalists, used in jazz.

comma: Breath mark (’).

common chord: Triad. Chord with root, third and fifth.

common time: Four beats to a measure, quarter note gets one beat. 4/4.

common tone: A note that remains the same between two chords.

còmodo (It): Comfortable.

complete cadence: I-IV-V-I.

compound interval: An interval larger than an octave (9th, 11th, 13th).

compound meter: A time signature in which the basic beat is divisible by 3 (6/8, 9/8, etc.).

con (It): With.

con anima (It): With spirit.

con brio: With animation.

concertmaster: First-chair violinist in an orchestra.

concerto: a composition for soloist and orchestra.

concert pitch 1: The pitch for C instruments (e.g. flute, oboe, trombone, violin, etc.). 2: International tuning pitch of A440 or A442.

con fuoco (It): With fire.

con gusto (It): With gusto.

consonance: Sounds pleasing to the ear.

con sordini (It): With mutes.

con sordino (It): With mute.

contra (It): In the octave below normal (e.g. contra bassoon).

contralto: The lowest female voice, a.k.a. alto.

contrary motion: Term used in counterpoint for two voices moving in opposite directions.

cor (Fr): Horn.

corona: Fermata.

count: The pulse or beat.

counterpoint: The combination of two or more melodic lines occurring simultaneously.

countertenor: The highest male singing voice.

cover: Slang for the performance of a length of Small notes indicating another instrument’s part.

cut time: 2/2 time signature.

cymbals: Percussion instruments of circular brass plates. May be struck together (crash cymbals), with a mallet (suspended cymbal), or mechanically (hi-hat).

D

da capo, D.C. (It): Direction in a piece of music to return to the beginning.

da capo al coda, D.C. al Coda (It): Direction to return to the beginning, play to the Coda sign, then to skip to the Coda and finish the piece.

da capo al fine, D.C. al Fine (It): Direction to return to the beginning of a piece and play to the “Fine” sign.

dal (It): “From the,” or “by the.”

dal segno, D.S. (It): Direction to return to the point marked by the sign .

dal segno al coda, D.S. al Coda (It): Direction to return to the sign , play to the coda sign , then skip to the coda.

dal segno al fine: Direction to return to the D.S. sign and play to the “Fine” sign.

dB (abbr.): Decibel. Measurement of loudness.

decrescendo: Gradually becoming softer.

degree: a note of a scale.

delicato (It): Delicately.

demiquaver: British term for sixteenth note.

demisemiquaver: British term for thirty-second note.

détaché (Fr): Short, detached bowing strokes.

di (It): Of, with.

diatonic: The tones of any major or minor scale.

didgeridoo: Australian aboriginal horn made of wood hollowed by termites, played with the lips and breath.

diminished: Lowered.

diminution: Shortening the notes in a theme.

discord: Dissonant sounds or sounds unpleasant to the ear.

disjunct: Moving by intervals larger than a second.

dissonance: Sounds unpleasant to the ear.

divisi, div. (It): Indication for separate parts written on one staff. To be played by two or more performers.

do: The first note (tonic) of a diatonic scale.

dodecaphonic: Twelve-tone

doit: A jazz technique used on brass instruments where a note is bent upwards.

dominant: Fifth degree of a major or minor scale.

doppio (It): Double.

Dorian: A medieval mode whole-step pattern from D to D on the white keys of the piano.

dot 1: Written above or below a note indicates staccato. 2: Written after a note, the dot increases the length by half its original value.

double bar: Two bar lines on a staff that show the end of a section or piece.

double bass: Lowest member of the violin family, tuned E, A, D, G.

double concerto: A concerto for two instruments.

double dot: Increases a note’s length by 3/4 of its original value.

double flat: Written before a note, it lowers the note a whole step.

double horn: A French horn comprised of two different horns (one in F, one in Bb), with valve to switch between the two. Better intonation and greater range.

double reed: Two thin pieces of cane bound together at one end which vibrate to produce sound for oboe, English horn, and bassoon.

double sharp: Written before a note, it raises the pitch of the note a whole step.

song written by someone other than the family performer.

cowbell: A metal bell struck with a drumstick.

crescendo: Gradually becoming louder.

cross rhythm: Different rhythms played at the same time.

crotchet: British name for quarter note.

cue 1: A gesture made by a conductor for a performer to make an entrance. 2: This is the (ta-ka-ta- with the

diminished interval: A minor or perfect interval lowered a half step.

diminished seventh chord: A chord with root, minor third, diminished fifth, and diminished seventh.

diminished triad: A triad with root, minor third, and diminished fifth.

diminuendo (It): Growing gradually softer.

double stop: For violin instruments, playing two notes at once.

double time: Twice as fast.

double tonguing: On brass and flute instruments, a method of rapidly articulating notes, alternating front and back of the tongue ka).

downbeat: the first beat of a measure given with downward stroke by the conductor.

drone: A note of the same pitch which continues for a long time. Used by instruments like bagpipes, 5-string banjo and hurdy-gurdy.

drum kit, drum set: A set of drums including several drums, usu. consisting of: snare drum, bass drum, hi-hat, ride cymbal, crash cymbal, hi- middle- and low tom toms.

duet or duo: Musical composition for two performers.

duple meter: A time signature with two beats to a measure (e.g. 2/4 or fast 6/8).

duration: The length of a note or rest.

dynamic accent: Emphasis given a note by louder articulation than normal.

dynamic markings: Symbols which indicate different levels of loudness or softness (e.g. p, mp, mf, f,).

dynamics 1: The level of loudness or softness. 2: They symbols for dynamics.

E

8va: Ottava altus. One octave higher.

8vb: Ottava bassus. One octave lower.

ear training: A technique of learning to hear music and write it down.

eighth: An octave.

eighth note, eighth rest: A note/rest with one eighth the length of a whole note, and half the length of a quarter note. Half of a beat in 4/4 time.

eleventh: Diatonic interval from the first to the eleventh note. Same letter name as the 4th.

embellishment: An ornament added to music.

embouchure: The position and use of lips, tongue, and teeth when playing a wind instrument.

English horn: An alto oboe with a pitch a fifth lower. Same conical shape but with a bulbous bell.

enharmonic: Two notes of the same pitch with different names (e.g. Ab and G#).

-etto (It): A suffix meaning “little.”

étude: A piece of music studied to improve technique.

euphonium: A brass instrument similar to the baritone horn but with a larger bore.

eurhythmics: A system which teaches rhythm by using body movement.

expression marks: Directions or symbols for musical expression and performed on interpretation, like dynamics, tempo, articulation, and mood.

F

f (abbr.): Forte. Loud dynamic.

fa: 4th Degree of a diatonic scale.

fake: Slang for improvisation. “If you can’t make it, fake it.”

fake book: A song book containing chord changes, lyrics, and melodies for many songs.

false cadence: see deceptive cadence.

falsetto (It): A high voice used for notes above the normal vocal range.

fanfare: A short piece of music for brass to attract attention.

F clef: The bass clef centered on the 4th line of the staff and naming that 4th line as F below middle C.

feminine cadence: A cadence ending on a weak beat.

fermata (It): A symbol indicating a hold or pause.

festoso (It): Happy or merry.

ff (abbr.): Fortissimo.

fff (abbr.): Fortississimo.

f-hole: On violin family instruments it’s the f-shaped sound holes on top of the instrument. Also on some guitars.

fiddle: A violin used for folk- or bluegrass music; it usu. has a flatter bridge, uses metal strings and a tuner on each string.

fiero (It): Bold.

fife: A high, keyless flute.

fifth: The interval of 5 diatonic scale degrees.

fine: The end.

flam: A drum rudiment. Small grace note before the main note.

flamenco: A Spanish dance/song usu. played on guitar and including rhythmic clapping and stomping of the dancer.

flat 1: The symbol used to lower a note by one half step. 2: To be below normal pitch.

flip: A jazz technique, usu. in brass instruments. Note is raised next pitch and then glissed down to the note.

flugelhorn: A brass instrument in the trumpet family with a wider bell than trumpet, a conical bore, and more mellow tone.

flute: A woodwind instrument of wood or metal in the shape of a cylinder closed at one end. Sound is produced by blowing across a hole near the closed end (see also: alto flute, bass flute).

flutter tonguing: A wind instrument technique of very rapid tonguing produced by rolling the tongue saying trrrrrrr.

form: The structure or organization of a piece of music.

forte (It): Loud.

fortissimo (It): Very loud.

fortississimo (It): Very very loud. Officially the loudest dynamic marking.

forzando, forzato (It): Forced. Strongly accented.

fourth: An interval of 4 diatonic degrees.

fourth chord: A chord with intervals a fourth.

French horn: A brass instrument with a conical bore, valves, highly flared bell, and many coils of tubing.

French sixth: A type of augmented sixth chord with a major third, augmented fourth, and augmented sixth above the root.

fret 1: On many string instruments, a strip usu of metal placed across the fingerboard to give a specific note when fretted. 2: The act of pressing the

ensemble: A group of performers.

entr'acte (Fr): A piece played between acts of an opera, ballet, or musical.

equal temperament: A tuning system which divides the octave into equal intervals.

espressivo (It): Expressive, with emotion.

estinto (It): Very soft, almost inaudible.

fingerboard: The surface of the neck on string instruments where the fingers press down on the strings.

fixed do: A singing system in which the held note C is always do. Compare to moveable do.

flag: A curved line extending from the right side of the stem of a note. Used on eighth notes and smaller notes.

fingers down on the fingerboard.

fretboard: The fingerboard of instruments with frets.

frog: The end of the bow which is in the hand.

fugue: A piece in which two or more parts are built upon a recurring theme.

full score: An instrumental score in which appear all the parts for the instruments.

fundamental: The lowest note in a harmonic series.

funk: A rhythmic style with much syncopation.

furioso (It): Furiously, wildly.

fusion: A combination of rock and jazz beginning in the early ‘70s.

fz (abbr.): Forzando, sforzando.

G

gapped scale: A scale made from a complete scale by leaving out some notes. The pentatonic scale is a gapped scale.

G clef: The treble clef, centered on the second line of the staff, giving that line the pitch G above middle C.

German flute: The standard flute.

German sixth: A type of augmented sixth chord with a major third, perfect fifth, and augmented sixth above the root.

Gestopft (Ger.): Muting a horn with the hand.

ghost bend: A guitar technique in which a note is pre-bent before sounding the string.

ghost note: A jazz technique in which the note indicated by parentheses is barely played.

gig: A musician’s slang for a job.

giocoso (It): Humorous.

glass harmonica: An instrument invented in the 1700s made of various sizes of glass bowls played by rubbing around the rim with a wet finger.

glee: Unaccompanied vocal music for three or four parts.

glee club: A group that sings glees.

glide: A smooth change in pitch from

grand staff: Both the treble and bass clef staffs. Piano music is written on a grand staff.

grave (It): Slow. Solemn.

grazia, grazioso (It): Grace, graceful.

groove: Slang for when music is perfectly in synch.

grosso (It): Great, large.

growl: A rough sound produced by growling in the back of the throat. Often used in jazz.

gruppetto (It): An ornamental group of notes like a turn, shake, or trill.

gusto (It): Enjoyment, gusto.

H

H 1: German for B natural. 2: Letter used with a number for the works of Haydn, after the cataloguer “Hoboken.”

half cadence: see imperfect cadence.

half note, half rest: A note/rest equal to half the length of a whole note/rest or two quarter notes/rests. Two beats in 4/4 time.

half step: The smallest interval in Western music. One twelfth of an octave.

harmonic minor: A natural minor scale with a half step between the 7th and 8th degrees of the scale.

harmonic progression: Movement from one chord to another.

harmonics 1: The pure individual tones which make up a complex tone. 2: On string instruments, a tone produced by touching the strings at the harmonic nodes.

harmonic series: A series of notes produced above a fundamental and having a specific order.

head voice: The upper register of the voice.

hypo-: Prefix meaning below.

I

ictus (Lat.): Stress, or an accent.

imitation: The restatement of a musical idea in another part. Used in counterpoint.

improvisation: Music composed on the spot.

incomplete cadence: A cadence in which a note other than the key note is in the top voice of the I chord.

interlude: A short piece used to bridge the acts of a play.

interrupted cadence: A cadence in which the dominant chord (V) moves to a chord other than the tonic (I).

interval: The distance between two notes.

Intonation: The accuracy of pitch.

inversion, chordal: A chord with a bass tone other than its root.

inversion, melodic: The change of an ascending interval to its corresponding descending interval.

Ionian: A medieval mode whose whole and half steps correspond to the major scale. C to C on the white keys of the piano.

isteso (It): The same. l’istesso tempo.

Italian sixth: A type of augmented sixth chord containing a major third and an augmented sixth above the bass.

J-K-L

jam: Slang for a gathering of musicians to play or improvise.

jazz: A style of music with African-American roots and using blue notes, improvisation, and strong rhythms.

jazz combo: A small jazz group usu consisting of piano, drums, bass, and a solo instrument.

one note to another.

glissando: A fast scale produced by sliding the hand finger rapidly from one note to another.

gong: A percussion instrument from Asia made up of a heavy circular metal plate and struck with a soft mallet.

G.P. (abbr.): Grand Pause. A pause in a piece of music.

grace note: An ornamental note played quickly before the main note.

grandioso (It): Grand, grandiose.

grand pause: A pause for the entire group of musicians.

heidimisemiquaver: British name for a sixty-fourth note.

hexachord: A six-note scale.

hi-hat cymbals: Used in the drum kit; a pair of cymbals facing each other and struck together with a mechanical device operated by the foot.

hold: A fermata or pause.

horn 1: The brass instrument with conical tube wound round itself. Another name for French horn. 2: Musician's slang for his or her instrument.

Hungarian minor scale: A harmonic minor scale with a raised 4th.

hyper-: Prefix meaning above or over.

jazz ensemble: A group of musicians (usu rhythm section, brass, and woodwinds) who play various styles of jazz.

K: Used to catalogue Mozart's works; represents Köchel. (e.g. K 201)

kettledrum: A percussion instrument with a tunable head. Also called timpani.

key 1: The tonal center of a composition, based on the tonic scale. 2: A lever pressed by the finger on an instrument (e.g. piano, flute).

keynote: The first note of the scale of a key. Also called the tonic.

key signature - accidentals at the left side of the staff between the clef and the time signature which indicate what key the piece is in.

kick: In jazz, a rhythmic accent or cue applied by the rhythm section.

la: The sixth degree of a diatonic scale.

lacrimoso (It): Tearful, mournful.

largamente (It): Broadly.

largando (It): Slowing down.

larghetto (It): A little faster than largo.

Largo (It): Broad. A very slow tempo.

leading note/tone: The seventh degree of a diatonic scale; leads the ear to the tonic note.

lead sheet: Melody line, lyrics and chord for a song. A fake book is made up of lead sheets.

leap: A skip of more than a 2nd.

ledger line, leger line: A short line drawn for a note above or below the staff.

legato (It): Smooth.

leggero, leggiero (It): Lightly.

leno (It): Faint.

lento (It): slow.

lesto (It): Lively.

licks: Slang for a short musical idea or phrase.

ligature 1: A metal device used by woodwind instruments to secure the reed to the mouthpiece. 2: A curved line over a group of notes to be sung on the same syllable.

lip: A verb meaning to adjust the pitch of a note slightly up or down.

lip trill: A technique used by brass players; an upward trill without use of valves.

l'istesso (It): The same.

loco (It): Return to the normal place. Used after playing 8va or 8vb.

Locrian: a medieval mode which starts on the seventh degree of a diatonic

major chord: A triad consisting of a root, major third, and perfect fifth.

major scale: A diatonic scale with half steps between from the third to fourth degrees and seventh to eighth degrees.

marcato (It): Stressed or accented.

marcia (It): March.

mariachi (Sp): A Mexican folk group with 2 violins, guitar, guitarron and maybe rhythm instruments.

martelé, martellato (Fr): Play with short detached bow strokes without lifting the bow from the strings.

masculine cadence: A cadence in which the last chord is on the strong beat.

measure: The space between two bar lines.

mediant: The third degree of a scale.

melisma: Several notes sung on the same syllable.

melismatic: Song that uses melismas.

melodic minor: A natural minor scale with the sixth and seventh degrees raised ascending, and lowered descending.

melody: A sequence of single notes.

meno (It): Less.

meter: The rhythmic structure of a piece determined by number of beats, time values and accents. Simple meters are divisible by two; compound meters are divisible by 3.

metronome: A mechanical or electronic device used for sounding beats per minute. Invented c. 1812.

mezza voce (It): Half voice. Quiet.

mezzo (It): Half or medium (e.g. mezzo forte).

mezzo forte (It): Medium loud.

mezzo piano (It): Medium soft.

mezzo soprano (It): A female voice between soprano and alto.

mf (abbr.): Mezzo forte.

mi: The 3rd degree of a diatonic scale.

mit (Ger.): With.

Mixolydian: A Medieval mode starting on the 5th degree of a diatonic scale. G to G on the white keys of a piano.

M.M. (abbr.): Stands for Maelzel's metronome, the man who invented the device.

mode: A type of scale with a certain arrangement of intervals. See Ionian, Dorian,Phrygian,Lydian,Mixolydian, Aeolian, and Locrian.

moderato (It): A moderate tempo.

modulate: To change from one key to another.

moll (Ger.): Minor.

molto (It): Very.

monotone: An unvaried pitch.

mordent: A melodic ornament consisting of the alteration of the written note with the note directly below (lower ~) or above (upper ~) it.

mouthpiece: On a brass or woodwind instrument, the part responsible for making the vibrations, placed on the player's lips or in the mouth.

moveable do: A system of singing using syllables in which the first note of any diatonic scale is do. See fixed do.

movement: A self-contained piece of music within a larger work.

mp (abbr.): Mezzo piano.

music theory: The study of how music is written down and put together.

music therapy: The use of music as a healing agent for physical and psychological problems.

muta (It): Direction to change keys, usu. found in timpani and horn parts.

mutes: Devices used to muffle, soften, or change the sound of an instrument.

N

natural: The symbol which indicates a note is neither sharp nor flat, and when the symbol is in front of the note, it cancels any previous accidental.

scale. B to B on the white keys of a piano.

lungo (It): Long.

Lydian: A medieval mode beginning on the 4th degree of a diatonic scale. F to F on the white keys of a piano.

M

ma (It): But. Allegro ma non tropo.

maestoso (It): Majestically.

maggiore (It): Major.

major: Used in music theory to describe intervals, chords, and scales.

middle C: The note C in the middle of the grand staff and near the middle of the keyboard.

minim: British name for the half note.

minim rest: Half rest.

minor: Used to describe intervals, chords, and scales. Means lesser.

minor scale (natural): A diatonic scale in which the 3rd, 6th and 7th degrees are lowered a half step from the major scale. See also harmonic minor, and melodic minor.

misterioso (It): Mysteriously.

natural horn: A horn with no valves or slides.

natural minor: A diatonic scale with the whole-half step pattern of WHWWHWW. A to A on the white keys of the piano.

Neopolitan sixth: A chord constructed on the fourth degree of a diatonic minor scale with a minor third and a minor sixth above the bass.

neck: The long slender part on a string instrument to which the fingerboard is attached.

neumes: The signs and symbols used for musical notation in the Middle Ages.

ninth: The interval of nine diatonic notes. An octave and a second.

ninth chord: Root, third, fifth, seventh, and ninth.

node: A point of lowest amplitude in the wavelength of a string. These points are where harmonics are produced on a string instrument.

non (Fr): No or not.

nonet: A piece for 9 musicians.

nonharmonic notes: Notes not a part of the chord structures around them.

non-transposing: instruments pitched in the key of C (e.g. flute, trombone, bells).

notehead: The main, bulbous part of a note.

O

O 1: The symbol for diminished. 2: The symbol for an open string.

obbligato (It): An optional part contrasting the melody. Originally meant an obligatory part.

oblique motion: Two melodic lines, one of which moves while the other remains stationary.

oboe: A double-reed woodwind instrument with a conical bore.

oboe d'amore: Slightly larger than the normal oboe and with a more bulbous bell. Pitched a minor third lower.

octave - the interval between the first and eighth degrees of a diatonic scale.

octet 1: Eight performers. 2: A piece of music for eight performers.

odd meter: A meter with an odd number of beats per measure, like 7/4 (3+4) and 5/8 (2+3).

oliphant: A medieval horn made from an elephant's tusk.

Op. (abbr.): Opus.

open: Not stopped or muted.

open fifth: A triad with no third.

open harmony: When notes of a chord aren't played as closely together as possible. See close harmony.

ornamentation: The addition of ornaments to a melody.

ornaments: Melodic embellishments. May be written in or improvised. Some ornaments: acciaccatura, appogiatura, arpeggio, grace notes, mordent, trill, turn.

ossia (It): Indicates a passage which is an alternative version.

ostinato (It): A repeated musical phrase, rhythmic pattern, or motive, usu. occurring in the bass.

ottava (It): Octave.

ottava alta (8va) (It): An octave higher.

ottava bassa (8vb) (It): An octave lower.

overblow: A technique of blowing harder used in brass instruments when harmonics are produced above the fundamental.

overtone series: The same thing as the harmonic series, but without the fundamental.

P

p 1: (It) Piano; soft dynamic. 2: (Sp) Pulgar, which is the thumb of the right hand in guitar music.

parallel chords: The movement of specific chords up and down the scale.

parallel fifths, fourths, octaves: Two parts moving in the same direction at the same time a fifth, fourth or octave apart.

parallel intervals: Movement of two or more parts of the same interval in the same direction.

parallel keys: Major and minor keys which have the same tonic.

parallel motion: The movement in two or more parts in the same direction with the same intervals.

passing notes: Scalewise notes which connect two notes of the harmony, but are not part of the harmony themselves.

pause: A rest of variable length. A fermata.

pedal point: An organ term used for a note, usu. in the bass, around which other notes move.

pedal tone: A "false" note below the fundamental on a brass instrument.

struck or shaken. Drums, maracas, bells, gongs, and xylophones.

perfect cadence: A cadence moving from the dominant chord (V) to the tonic chord (I).

perfect interval: Octave, fifth, and fourth without alterations.

perfect pitch: The ability to identify any note by ear.

period: A segment of music consisting of two or more phrases and a cadence.

pesante (It): Heavy.

pf (abbr.): Soft then loud.

phrase: A musical "sentence" or idea.

Phrygian: A medieval mode beginning on the third degree of a diatonic scale. E to E on the white keys of a piano.

pianissimo (It): Very soft.

pianississimo (It): Very, very soft.

piano (It) 1: Soft. 2: Short for "pianoforte," a keyboard instrument.

piano quartet: Violin, viola, cello, and piano.

piano trio: Violin, viola, and piano.

Picardy third: A minor piece ending on a chord with a major third.

piccolo (It): A member of the flute family which sounds an octave higher than written. Smaller than the normal flute.

pitch: The highness or lowness of a tone.

pitch pipe: A small wind instrument used for tuning.

pivot chord: A chord used when modulating which is the same in both keys.

pizzicatto: Plucking the strings of an instrument that uses a bow.

placido (It): Calm, placid.

plagal cadence: A cadence which moves from the subdominant chord (IV) to the tonic chord (I).

poco a poco (It): Little by little.

polychords: Chords resulting from two or more triadic units.

polymetric: The simultaneous use of different meters.

polyphony: Music which combines two

open notes 1: On string instruments, the open, unfretted strings. 2: Notes on wind instruments played without the use of valves or keys.

open triad: Triad without the third.

Opus (Lat.): Means “work”; used with a number which shows the order in which a composer’s work were composed.

pentachord: The first five notes of a diatonic scale.

pentatonic scale 1: Any scale with five notes. 2: The major scale without the 4th and 7th degrees. The black keys on a piano.

percussion family: Instruments of indefinite pitch which resonate when struck or shaken.

polytonal: The simultaneous use of two or more melodic lines.

pomposo (It): Pompous.

ponticello (It): The bridge of a string instrument.

portamento: A smooth glide from one note to another.

portado (It): An articulation halfway between staccato and legato.

pp (abbr.): pianissimo.

ppp (abbr.): pianississimo.

prebend: To bend a string before playing on a string instrument, esp. guitar.

preciso (It): Exact.

prélude (Fr): An introductory piece or movement.

preparation: The use of a consonant note before playing that same note as part of a discord.

prestissimo (It): Very, very fast. The fastest tempo.

presto (It): Very fast.

prima donna (It): The most important woman in an opera.

primary chords: The tonic (I), subdominant (IV), and dominant (V) chords of a key.

prime 1: Unison. 2: The first note of a scale.

principal: The section leader.

program music: Music that tells a story or paints a picture. As opposed to absolute music.

progression: Movement from one chord to another.

pronto (It): Prompt.

pulgar (Sp): Thumb. Used specifically in guitar music for the thumb of the right hand.

pull-off: A technique used by string players in which a fretted note is plucked while it's released which sounds the note below.

pulse: The beat.

Pythagorean scale: The earliest known scale comprising an octave. Whole and half step arrangements are the same as the major scale, but the ratio of whole and half steps is different.

Q

Quadrat (Ger.): A natural sign.

quadruple meter: A time signature with four beats in a measure.

quadruplet: Four notes to be played in the time of three notes of equal value.

quintet 1: A composition for five performers. 2: Five performers.

quintuple meter: A time signature with five beats per measure (e.g. 5/4 time).

quintuplet: five notes to be played in the time of four notes of equal value.

R

racket: 1: A double-reed instrument of the Renaissance period. 2: The sound a beginning alto saxophone player makes.

ragtime: The earliest form of jazz from the early 1900s.

rallentando (It): Decreasing speed gradually.

range: The notes from lowest to highest that an instrument or voice is capable of producing.

rattenuto (It): Slowing down.

re: The second note of a diatonic scale.

reduction: The arrangement of a piece for a smaller number of parts.

reed: A vibrating strip of cane which vibrates at high frequency when blown.

refrain: A section of a composition that occurs several times.

register: A certain range of an instrument or voice.

relative keys: Major and minor keys with the same key signature (e.g. A minor and C major).

Renaissance (Fr): Meaning "rebirth." The musical era from the mid 1400s through the end of the 1500s.

resolution: A progression of chords or notes from dissonance to consonance.

rest: A period of silence. Types of rests: whole rest, half rest, quarter rest, eighth rest, sixteenth rest, thirty-second rest.

retardation: Gradually slowing.

retrograde: Playing a melody line backwards.

rhythm: A pattern of long and short in music.

rhythm section: In jazz and pop music, the piano, bass, guitar and drums. Provides the harmony and rhythm.

romantic: The musical era from ~1820 to 1900.

root: The fundamental note of a chord or scale.

rubato (It): A free tempo which speeds up and slows down at the conductor's or performer's discretion, but without changing the basic pulse.

rudiments: Basic sticking patterns for drums.

run: A fast scale passage.

S

S. (abbr.): Segno, senza, sign, sol, solo, soprano, sordini, subito.

SA (abbr.): Used in choral music to indicate soprano, alto.

SAB (abbr.): Used in choral music to indicate soprano, alto, baritone.

sackbut (Ger.): The ancestor of trombone. German for push-pull.

saltato, saltando (It): a bow technique in which the bow is bounced lightly on the string.

SATB: Used in choral music to indicate soprano, alto, tenor, bass.

saxhorn: Brass family instruments invented by Adolphe Sax.

saxophone: A woodwind family instrument of keyed brass, conical bore, and single reed. Types of saxophones: Eb sopranino; Bb soprano; Eb alto; Bb tenor; Eb baritone; Bb bass.

scale: An ascending or descending series of tones related to a certain chosen fundamental tone.

scale degrees: The names and numbers for notes in a scale.

scat singing: A form of vocal jazz improvisation in which the performer makes up the melody with nonsense syllables.

scherzando (It): Playful and light-hearted.

scherzo (It): Literally "joke." A piece with a lively tempo.

schmaltz (Yid): Excessively sentimental.

the space of three notes of equal value.

composition

quarter note, quarter rest: A note/rest one fourth the length of a whole note and half the length of a half note. Unornamented.

Equal to one beat in 4/4 time.

quartet 1: A composition for four performers. 2: Four performers.

quasi (It): Almost, as if.

quaver: British term for an eighth note.

riff: Repeated melodic idea.

ritardando (It): Gradually decreasing speed.

ritenuto (It): Immediately slower.

rolled chord: A chord in which the notes are played in rapid succession, much like an arpeggio.

score: The notation of a composition rhythmically.

secco (It): Means “dry.”

second: The interval between two consecutive degrees of a diatonic scale.

secondary dominant: A dominant chord (V) built upon the fifth degree of a chord other than the tonic.

secular music: Any music not sacred.

segno (It): Sign.

segue: To continue without a break.

semibreve: British name for whole note.

semiquaver: British name for a sixteenth note.

semitone: One half step.

sempre (It): Always.

senza (It): Without. Senza sordino.

septet 1: A composition for seven performers. 2: Seven performers.

septuplet: Seven notes played in the time of four or six notes of equal value.

seventh: The interval between the first and seventh degrees of a diatonic scale.

seventh chord: A chord containing a root, third, fifth, and seventh.

sextet 1: A composition for six performers. 2: Six performers.

sextuplet: Six notes played in the time of four notes of equal value.

sharp 1: The symbol indicating to raise a note one half step. 2: To be slightly above normal pitch.

sightreading: Playing a piece of music without studying it.

sightsinging: Singing a piece of music without studying it.

signs: Symbols which tell a performer articulation, bowing, breathing, dynamics, fingering, ornamentation and other musical effects.

similar motion: The movement of two or more parts in the same direction.

simile, sim. (It): To continue in a similar style.

simple meter: A time signature whose pulse is divisible by 2 (e.g. 2/4, 3/4,4/4). See compound meter.

skip: Melodic movement of more than a whole step.

slide 1: To move smoothly from one note to another with a constant sound. 2: The movable part on a trombone which is used to change the pitch by lengthening the instrument.

slur: A curved line connecting two notes of different pitch; to be played as legato as possible.

smorzando (It): Fading away.

so, sol: A solfege syllable for the fifth degree of the diatonic scale.

solfege: A system used for eartraining which uses syllables (do, re, mi, etc.) for the degrees of the scale.

solo (It): Means “alone.” To perform alone or as the most important part.

sopra (It): Over, above.

soprano: The highest female singing voice.

soprano clef: The C clef that puts middle C on the first line of the staff.

sordino (It): Mute.

sostenuto (It): Sustained.

sotto voce (It): Quietly, beneath the voice.

Sousaphone: A tuba made for John Phillip Sousa’s band which encircles the player.

spacing: The vertical placement of the notes of a chord.

spezzato (It): Divided.

spiccato (It): A bow technique in which the middle of the bow is bounced on the string at a moderate speed.

SSA: Used in choral music to indicate soprano, soprano, alto.

SSAA: Used in choral music to indicate two sopranos, two altos.

staccato (It): Means “detached.” Short separated notes indicated by a small dot over or under the note head.

staff, staves: The horizontal lines on

string quintet: Two violins, two violas, and cello.

string trio: Violin, viola, cello.

subdominant: The fourth degree of a diatonic scale.

subito (It): Suddenly.

submediant: The sixth degree of a diatonic scale.

subtonic: A flatted seventh degree of a diatonic scale, one whole step below the tonic.

suite: A collection of short instrumental movements.

sul (It): On the.

sul ponticello (It): Bowing on or next to the bridge to produce a high-pitched eerie sound.

sul tasto: On the fingerboard.

superdominant: The sixth degree of diatonic scale. Same as submediant.

supertonic: The second degree of a diatonic scale.

sur (Fr): On, over.

suspension: A counterpoint technique in which a consonant note is sustained while the other voices move which then results in a dissonance which is resolved.

sussurando (It): Sussurating, whispering.

swing 1: A style of jazz featuring big band dance music. 2: A treatment of the eighth note which gives it a lilting triplet feel of long-short.

symphony 1: A large orchestra. 2: A orchestra, usu. in 4 movements.

syncopation: Rhythmic accents on weak beats, or weak parts of the beat.

system: Two or more staves connected.

T

t. (abbr.): Tempo, trill, tre, tutti.

T. (abbr.): Tenor, tonic.

sin’ al fine (It): To the end.

single reed instruments: Instruments which use only one reed attached to a mouthpiece of some sort.

six-four chord: A triad in the second inversion with a sixth and a fourth above the bass note.

sixteenth note, sixteenth rest: A note/rest one sixteenth as long as a whole note and half the length of an eighth note. In 4/4 time, 1/4 of a beat.

sixth chord 1:A triad in the first inversion, with a sixth and a third above the root. 2: A chord with an added sixth.

stem: A vertical line extending from a note head.

step: Movement melodically of one or two semitones.

stesso (It): Same. L’stesso tempo.

stick 1: The wooden part of the bow. 2: A conductor’s baton.

sticking: The hand pattern for drums.

stringendo (It): Hurrying the tempo to increase tension.

string quartet: Two violins, viola, and cello.

TAB (abbr.): Tablature. A method of lute and guitar notation developed for the strings and numbers frets. Developed in 1500s.

tacet (Lat.): Means “be silent.” Direction in a part to not play or sing.

tactus (Lat.): Used in the 1400s to measure the length of a beat. Precursor to bar lines.

tag: The end of a piece, the coda.

taking 4s/8s: A jazz term. Player takes a solo, usu. improvised, 4 or 8 bars long.

talking drum: Ancient drum of western Africa, beaten with a curved stick. Also waisted drum, the pitch controlled by squeezing at the waist which tightens the skin membrane thereby raising the pitch.

tardo, tardando: Become slower.

tanto (It): Much.

temperament: A system of tuning, esp. of pianos, in which pure intervals are altered slightly to enable playing in different keys.

tempestoso (It): Tempestuous, stormy.

tempo: Means “time.” The speed of music.

tenor: A high male voice, the range between alto and baritone.

tenor clef: A C clef falling on the fourth line of the staff.

tenor saxophone: Of the saxophone family, in the key of Bb.

tenor trombone: The regular trombone.

tenth: An interval of an octave and a third.

tertian harmony: Usual harmony, based on thirds.

tessitura (It) 1: The average highness and lowness of a piece. 2: The usable range of a voice or instrument.

tetrachord: The first four notes of a scale.

texture: The number of voices in a piece; monophonic, homophonic, and polyphonic.

theme: The musical subject of a piece, the main idea.

thesis (Gk): The strong beat, usu. the downbeat.

third: An interval of three diatonic scale degrees.

thirty-second note, thirty-second rest: A note usu. a

tone: A sound of particular quality. The basis of music.

tone row: Used in serial and twelve-tone music. The order of twelve notes chosen by a composer which appear in the composition in that specific order.

tonguing: A technique on wind instruments of articulating notes with the tongue.

tonic: The first degree of a scale (I), or the root of a chord.

tonic accent: A type of accent in which the accented note is significantly higher than those around it.

tr (abbr.): Trill.

trading 4s/8s: Jazz term. Players take turns playing solos, usu. improvised, of 4 or 8 bars.

train wreck: Slang for when an ensemble’s playing contains so many mistakes that it breaks down to the point of stopping.

tranquillo (It): Calm, tranquil.

transcription: The writing down of a piece from a recording.

transpose, transposing: Changing a piece from one key to another.

transposing instruments: Instruments whose notes sound at a different pitch than written.

treble clef: The G clef which centers on the second line of the staff, naming it G.

tremolo (It): 1: A bow technique in which short up and down bow strokes are used on a single note. 2: The rapid alteration between two or more notes, usu. more than a step apart.

triad: A chord of three notes: a root, third, and fifth.

trill: An ornament. The rapid alteration of one note with another note usu. a

trombone: Member of the brass family. Uses a slide to change pitch. Also called ‘bone. Types of ‘bones: soprano (also called slide trumpet), tenor, bass.

troppo (It): Too much. (e.g. Allegro non troppo).

troubadour: A wandering minstrel in the Middle Ages of Western Europe.

trumpet: A member of the brass family with cylindrical bore and high pitch and brilliant sound. Types of trumpets: Bb, C, Eb, Bb piccolo.

TTB (abbr.): Used in choral music to indicate tenor, tenor, bass.

TTBB (abbr.): Used in choral music to indicate two tenors, two basses.

tuba: Lowest member of the brass family, conical bore, very large. May be in BB-flat, Eb, or F bass.

tune 1: A song or melody. 2: To put an instrument at the correct pitch (in tune).

tuner 1: A mechanical device which reads pitches and tells the player where it falls in relation to standard intonation. 2: A small screw near the bridge which allows fine tuning of string instruments.

tuning fork: A device with two tines that, when struck, vibrates to produce a pure single note.

turn: An ornament which “turns” around the principal note, going above it and below it. Indicated by the symbol .

tutti (It): Means “all.” Used as an indication for all players to play, usu. comes after a solo or soli section.

twelve-bar blues: A musical form using three chords (I, IV, V) in a specific pattern which is twelve bars long. Characterized by many blue notes and improvisation.

note/rest one thirty-second as long as a whole note, and half as long as a sixteenth note.

ti: The seventh degree of a diatonic scale. The leading tone.

tie: A curved line which connects notes of the same pitch indicating they are to be played as one continuous note.

timbre: Sound quality or color.

time: A synonym for meter.

time signature: The meter. Numbers at the beginning of a piece of music, after the clef. Top number is beats per measure, bottom number is which note receives one beat.

tonal: Relating to key.

step or half step higher than the written note. Indicated by the symbols .

trio 1: A composition for three performers. 2: Three performers. 3: The middle section of a march.

triple meter: Meters with three beats per measure, or meters with beats divisible by three.

triple-tonguing: Technique of rapid articulation which uses the front and back of the tongue (t-k-t, or t-t-k, or t-k-t, k-t-k).

tritone: The interval of an augmented fourth or diminished fifth. Considered the most dissonant interval.

tromba (It): Trumpet.

twelve-tone scale: A scale using all 12 half steps in an octave organized in a certain order called a tone row.

U

ukulele (HI): A Hawaiian instrument in the string family, small with four strings.

unequal temperament: A system of tuning, esp. of piano which allows an instrument to play in several keys.

unison: Two or more voices sounding the same pitch.

un poco (It): A little.

upbeat 1: The “and” of the beat, the second half of the beat. 2: A pick-up note or anacrusis. 3: Denotes a fast or happy tune.

up bow: Stroking the bow upward.

up-tempo: Fast.

ut (Lat.): Another name for do or C.

V

valve: A device on brass instruments which redirects the air column to produce a different pitch, may be piston or rotary.

vamp: A short, usu. introductory section, which repeats until a performer is ready to enter.

vibrato: A type of ornament which is a fluctuation of pitch. Used almost constantly in violin, flute and voice.

viola: Instrument in the violin family, uses alto and treble clef, sounding lower than violin.

violin family: Instrument of the violin family (imagine that), which uses treble clef, has four strings and a high pitch.

violoncello: A member of the violin family of the tenor range. Held between the knees and uses the bass and treble clefs. Also called cello.

virtuoso: An instrumental performer of exceptional skill.

vivace (It): A very quick tempo.

Vl., Vln (abbr.): Violin.

Vla. (abbr.): Viola.

Vlc. (abbr.): Violoncello.

vocalise: A vocal warm-up exercise using different vowels.

vocal tenor clef: A G clef used for tenor parts in vocal music and pitched an octave below regular treble clef.

voice 1: An instrumental or vocal part. 2: The sound of the human voice.

voice leading: The movement of an individual part in polyphonic music.

voicing: The arrangement of pitches horizontally in a chord.

voix (Fr): Voice.

volti (It): Turn the page.

volti subito (It): Turn the page quickly.

volume: Loudness.

vox (Lat.): Voice.

V.S. (abbr.): Volti subito.

W

Wagner tuba: Five-valved horns designed by Richard Wagner for use in his opera The Ring of the Nibelung.

wah: A brass instrument sound produced when a device (stem of harmon mute or plunger mute) is removed from the bell.

walking bass: A bass line, usu. moving stepwise, in a steady pattern of quarter or eighth notes.

well-tempered: A tuning system in which an instrument, usu. piano, can play in all twelve keys.

whole note, whole rest: A note equal to two half notes/rests, or four quarter notes/rests. Four beats in 4/4 time.

whole step: Two half steps, or a major second.

wind instrument: An instrument on which the sound is produced by the vibration of an air column.

woodwind: An instrument made of wood or using a reed to create vibrations. Also the flute.

woodwind quintet: Flute, clarinet, oboe, French horn, and bassoon.

X-Y-Z

xylophone: A barred pitched percussion instrument, often with resonator tubes extending down from the bars.

yodel: A style of singing in which the voice centers around the break between the normal voice and falsetto. Originated in Switzerland.

Zink (Ger.): Cornett.

zydeco: A style of music mixing Cajun, Afro-Carribbean, and rhythm and blues.

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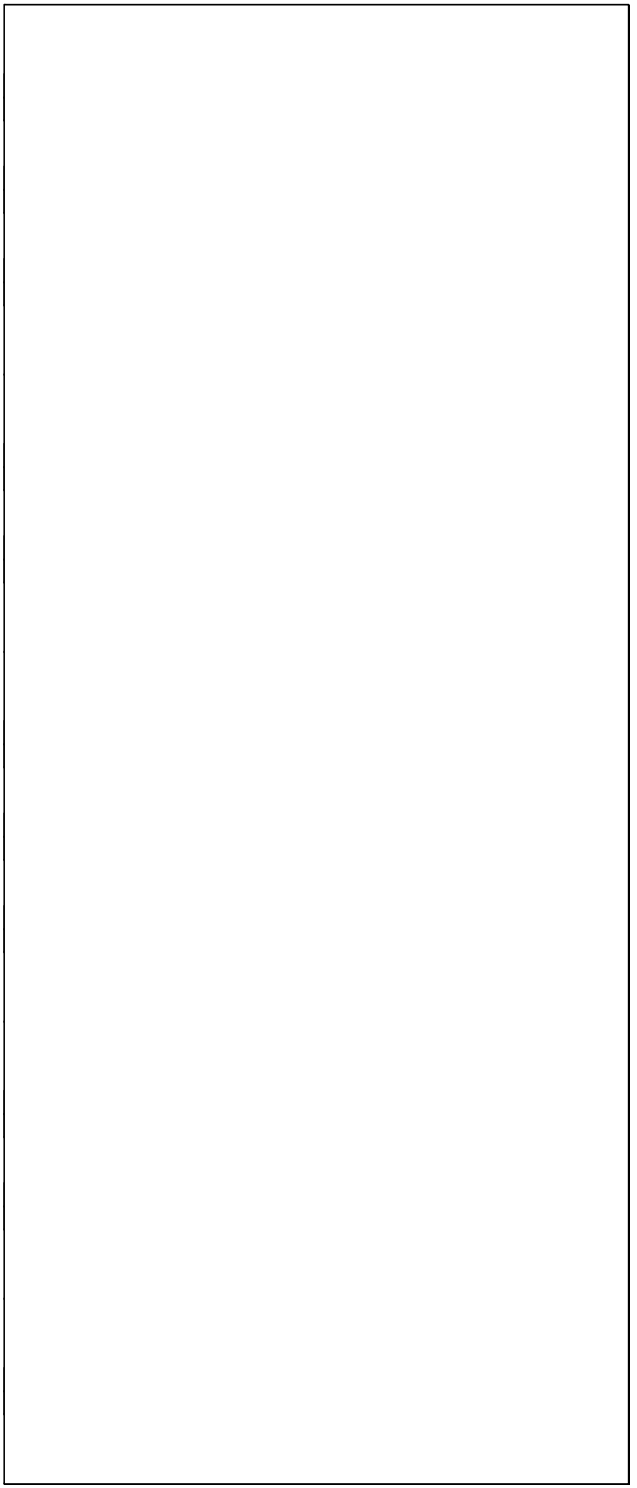

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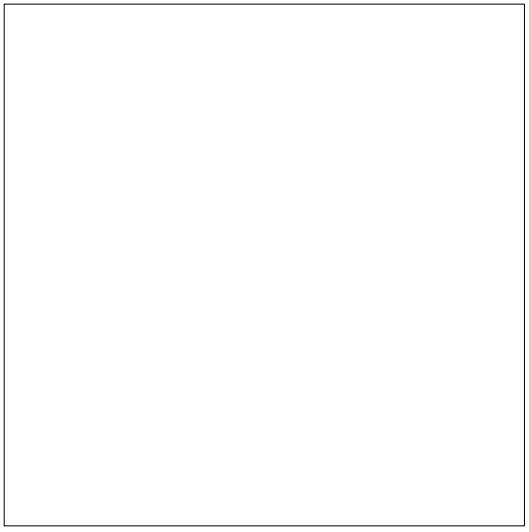

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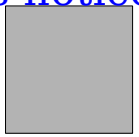

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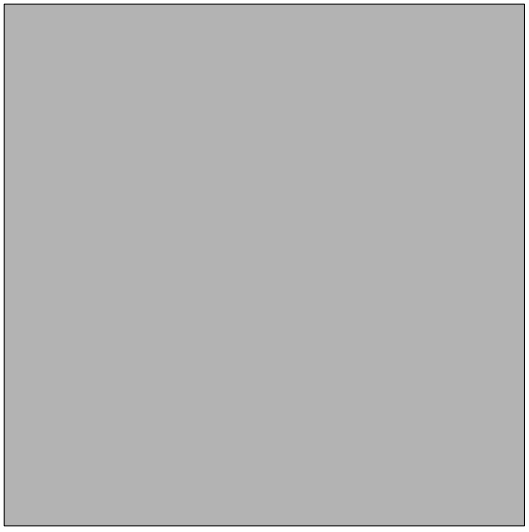

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